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PASSWORD:
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                     Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
NEWS
         Apr 08
                 "Ask CAS" for self-help around the clock
NEWS
         Apr 09
                 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS
         Apr 09
                 ZDB will be removed from STN
     5
NEWS
         Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS
     6
         Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
     7
NEWS
         Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8
         Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS 9
         Jun 03
                 New e-mail delivery for search results now available
NEWS 10
         Jun 10
                 MEDLINE Reload
                 PCTFULL has been reloaded
NEWS 11
         Jun 10
NEWS 12
         Jul 02
                 FOREGE no longer contains STANDARDS file segment
NEWS 13
         Jul 22
                 USAN to be reloaded July 28, 2002;
                 saved answer sets no longer valid
NEWS 14
         Jul 29
                 Enhanced polymer searching in REGISTRY
NEWS 15
         Jul 30
                 NETFIRST to be removed from STN
NEWS 16 Aug 08
                 CANCERLIT reload
NEWS 17
         Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
         Aug 08
                 NTIS has been reloaded and enhanced
NEWS 19
         Aug 19
                 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS 20
         Aug 19
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21
         Aug 19
                 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26
                 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03
                 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16
                 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded
NEWS 29 Oct 24 BEILSTEIN adds new search fields
NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 32 Nov 18 DKILIT has been renamed APOLLIT
NEWS 33 Nov 25 More calculated properties added to REGISTRY
NEWS 34 Dec 02 TIBKAT will be removed from STN
NEWS 35 Dec 04 CSA files on STN
NEWS 36 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 37 Dec 17
                 TOXCENTER enhanced with additional content
NEWS 38 Dec 17
                 Adis Clinical Trials Insight now available on STN
NEWS 39 Dec 30 ISMEC no longer available
NEWS EXPRESS December 31 CURRENT WINDOWS VERSION IS V6.01a,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS
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              General Internet Information
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              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
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=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:05:00 ON 06 JAN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 3 JAN 2003 HIGHEST RN 478133-28-7 DICTIONARY FILE UPDATES: 3 JAN 2003 HIGHEST RN 478133-28-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> => Uploading 09895975.str

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

G1 C,N,Cy G2 Hy,Ak,Ph 09/ 895,975

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 15:05:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 12937 TO ITERATE

100.0% PROCESSED 12937 ITERATIONS

589 ANSWERS

SEARCH TIME: 00.00.01

L2 589 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
148.15
148.36

FILE 'CAPLUS' ENTERED AT 15:05:33 ON 06 JAN 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 6 Jan 2003 VOL 138 ISS 2 FILE LAST UPDATED: 5 Jan 2003 (20030105/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 12

L3 110 L2

=> d 13 1- ibib abs fhitstr
YOU HAVE REQUESTED DATA FROM 110 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:882068 CAPLUS

DOCUMENT NUMBER: 137:364890

TITLE: Use of triazolopyrimidine derivatives as microbicides

for technical materials and wood preservatives

INVENTOR(S): Bruns, Rainer; Kugler, Martin; Jaetsch, Thomas; Elbe,

Hans-Ludwig; Kuhnt, Dietmar; Gebauer, Olaf; Rieck,

Heiko

PATENT ASSIGNEE(S): Bayer Ag, Germany

SOURCE: Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.				KI	ND	DATE			Α	PPLI	CATI	ON NO	ο.	DATE			
										-								
	DE	1012	4208		Α	1	2002	1121		D.	E 20	01-1	0124	208	2001	0518		
	WO	2002	0940	20	Α	1	2002	1128		W	0 20	02-E	P496	5	2002	0506		
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	PL, P				RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,
			UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,
			ТJ,	TM														
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AT,	BE,	CH,
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG
	US 2002198222					1	2002	1226		U	S 20	02-14	47224	4	2002	0516		
PRIOF	RIORITY APPLN. INFO.								1	DE 2	001-	1012	4208	Α	2001	0518		
OTHER	SC	URCE	(S):			MAR	PAT :	137:	3648	90								
GI	THER SOURCE(S):																	

AB The triazolopyrimidine derivs. I [R1 = alkyl, alkenyl, alkynyl or cycloalkyl; R2 = H or alkyl; R1NR20 = (un)substituted heterocyclyl; R3 = (un)substituted alkyl; R4 = H or halo] and their salts N-oxides or isomers, are used for the microbicidal protection of tech. materials and as wood preservatives.

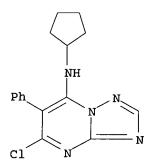
IT 150987-39-6

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(microbicide for tech. materials and wood preservative)

RN 150987-39-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-chloro-N-cyclopentyl-6-phenyl-(9CI) (CA INDEX NAME)



L3 ANSWER 2 OF 110 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:831741 CAPLUS DOCUMENT NUMBER: 137:325435

09/ 895,975

TITLE:

Preparation of 7-amino[1,2,4]triazolo[1,5-

a]pyrimidines as agricultural bactericides and

fungicides

INVENTOR(S):

Gebauer, Olaf; Greul, Joerg Nico; Heinemann, Ulrich; Elbe, Hans-Ludwig; Krueger, Bernd-Wieland; Dunkel, Ralf; Voerste, Arnd; Ebbert, Ronald; Mauler-Machnik, Astrid; Wachendorff-Neumann, Ulrike; Kuck, Karl-Heinz;

Kitagawa, Yoshinori

PATENT ASSIGNEE(S):

SOURCE:

Bayer AG, Germany Ger. Offen., 16 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. KI					ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
	DE	1012	1101		 A	 1	2002	1031		_ D:	E 20	 01-1	0121	101	2001	0427		
	WO	2002	0881	25	A.	2	2002	1107		W	20	02-E	P418	7	2002	0416		
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,
			ΡL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	ŪĠ,	US,	UΖ,	VN,	ΥU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,
			ТJ,	TM														
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
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			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
PRIOR	RITY	APP	LN.	INFO	. :				]	DE 2	001-	1012	1101	Α	2001	0427		
OTHER	R SC	URCE	(s):			MAR	PAT :	137:	3254	35								
GI																		

AΒ Title compds. [I; R1 = (substituted) alkoxy, alkenyloxy, alkynyloxy, cycloalkyloxy, alkylamino, dialkylamino, alkenylamino, alkynylamino, cycloalkylamino, N-cycloalkyl-N-alkylamino, alkylideneamino, SR4; R4 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R2 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R3 = (substituted) aryl; X = halo], were prepd. as agricultural bactericides and fungicides (no data). a mixt. of 5,7-dichloro-6-(2,6-difluorophenyl)[1,2,4]triazolo[1,5a]pyrimidine, tert-butylhydroxylamine hydrochloride, and Et3N in CH2Cl2 was stirred 1 day at 40.degree. and 1 day at room temp. to give 64% 7-(tert-butoxyamino)-5-chloro-6-(2,6-difluorophenyl)[1,2,4]triazolo[1,5a) pyrimidine.

IT 473266-39-6P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aminotriazolopyrimidines as agricultural bactericides and fungicides)

ΡN 473266-39-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5-chloro-7-(2,2-dimethylhydrazino)-6phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 3 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:637565 CAPLUS

DOCUMENT NUMBER:

137:185499

TITLE:

Preparation of triazolopyrimidines as thrombin

inhibitors

INVENTOR(S):

Williams, Peter D.; Coburn, Craig; Burgey,

Christopher; Morrissette, Matthew M.

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

PCT Int. Appl., 184 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO. KI				ND :	DATE			A.	PPLI	CATI	ON NO	ο.	DATE				
									_									
WO	2002	0642	11	Α	1	2002	0822		W	0 20	02-U	S465	4	2002	0205			
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
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		ŪĠ,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
PRIORIT	Y APP	. :				1	US 20	001-	2678	13P	P	2001	0209					
OTHER S	OURCE		MAR	PAT :	137:	1854	99											
GI																		

Ι

AB Title compds. [I; R1 = H, halo, OH, NH(CH2)nR5, NHCH2CF2R5, etc.; n = 1-3; R2 = H, (CH2)mR6, SO2R6; m = 0-2; R3 = H, alkyl, cycloalkyl, CF3; R2R3 = atoms to form a 5-7 membered nonheterocyclic ring; R4 = CH2R7, NH(CH2)mR7; R5 = H, pyridine oxide, tetrahydrothiophene dioxide, (substituted) (hetero)cyclyl, etc.; R6 = pyridine oxide, (substituted) (hetero)cyclyl, etc.; R7 = (substituted) Ph, pyridyl], were prepd. Thus, 3-(2-methyl-5-chlorophenylamino)-5-amino-1,2,4-triazole (prepn. given) and Et acetoacetate in HOAc were heated to reflux for 18 h. to give 2-(2-methyl-5-chlorophenylamino)-5-methyl-7-hydroxy-1,2,4-triazolo[1,5-

IT

RN

CN

a]pyrimidine. The latter was refluxed 1 h with POCl3 to give the 7-chloro deriv. which was heated with 2-(2-pyridyl)ethylamine at 100.degree. for 30 min. to give 2-(2-methyl-5-chlorophenylamino)-5-methyl-7-[2-(2-pyridyl)ethylamino]-1,2,4-triazolo[1,5-a]pyrimidine dihydrochloride (II). I inhibited thrombin with IC50<24 nM. II drug compns. are given. 450398-77-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compd.; prepn. of triazolopyrimidines as thrombin inhibitors) 450398-77-3 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-2,7-diamine, N2-(5-chloro-2-methoxyphenyl)-N7-[(4-methoxyphenyl)methyl]-5-methyl-6-(phenylmethyl)-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 110 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:487564 CAPLUS

DOCUMENT NUMBER: 137:47222

DOCUMENT NUMBER: 137:47222

TITLE: Preparation of aminotriazolopyrimidines as

microbicides and pesticides.

INVENTOR(S): Gebauer, Olaf; Elbe, Hans-Ludwig; Henrich,

Marielouise; Marhold, Albrecht; Wachendorff-Neumann, Ulrike; Mauler-Machnik, Astrid; Kuck, Karl-Heinz; Voerste, Arnd; Kitagawa, Yoshinori; Heinemann, Ulrich;

Hilgers, Petra; Pleschke, Axel

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	E A	PPLICATION NO.	DATE
WO 2002050077	A2 2002	20627 W	O 2001-EP14415	20011207
W: AE, AG,	AL, AM, AT,	, AU, AZ, BA,	BB, BG, BR, BY	, BZ, CA, CH, CN,
CO, CR,	CU, CZ, DE,	, DK, DM, DZ,	EC, EE, ES, FI	, GB, GD, GE, GH,
GM, HR,	HU, ID, IL,	, IN, IS, JP,	KE, KG, KP, KR	, KZ, LC, LK, LR,
LS, LT,	LU, LV, MA,	, MD, MG, MK,	MN, MW, MX, MZ	, NO, NZ, OM, PH,
PL, PT,	RO, RU, SD,	SE, SG, SI,	SK, SL, TJ, TM	, TR, TT, TZ, UA,

UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10063115 A1 20020627 DE 2000-10063115 20001218 AU 2002031676 A5 20020701 AU 2002-31676 20011207 PRIORITY APPLN. INFO.: DE 2000-10063115 A 20001218

WO 2001-EP14415 W 20011207

II

OTHER SOURCE(S):

MARPAT 137:47222

GI

AB Title compds. [I; R1, R2 = (substituted) alkyl, alkenyl, alkynyl; R3 = (substituted) heterocyclyl, alkyl; X = halo], were prepd. as microbicides and pesticides (no data). Thus, 5,7-dichloro-6-(2,2-difluoro-1,2-benzodioxol-4-yl)-1,2,4-triazolo[1,5-a]pyrimidine, (3-fluoropropyl) (methoxycarbonylmethyl) amine, and K2CO3 were stirred 16 h in MeCN to give 64.8% title compd. (II).

IT 438527-54-9P

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aminotriazolopyrimidines as microbicides and pesticides)

RN 438527-54-9 CAPLUS

CN Glycine, N-[5-chloro-6-(2,2-difluoro-1,3-benzodioxol-4-yl)[1,2,4]triazolo[1,5-a]pyrimidin-7-yl]-N-(3-fluoropropyl)-, methyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 5 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:391719 CAPLUS

DOCUMENT NUMBER: 136:401776

TITLE: Preparation of preventive or therapeutic medicines for

diabetes containing fused-heterocycle compounds such

as pyrazolopyrimidines

INVENTOR(S):
Kato, Fuminori; Kimura, Hirohiko; Omatsu, Masato;

09/ 895,975

Yamamoto, Kazuhiro; Miyamoto, Ryuji

PATENT ASSIGNEE(S): Ishihara Sangyo Kaisha, Ltd., Japan

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
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			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	PT,
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,
			UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM		
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			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
	JΡ	2002	2120	76	A:	2	2002	0731		J	P 20	01-3	4633	9	2001	1112		
	ΑU	2002	0152	23	A!	5	2002	0527		A	U 20	02-1	5223		2001	1116		
PRIO	AU 2002015223 RIORITY APPLN. IN				. :					JP 2	000-3	3517	64	Α	2000	1117		
									1	WO 2	001-	JP10	061	W	2001	1116		

OTHER SOURCE(S):

CASREACT 136:401776; MARPAT 136:401776

GΙ

AB The title compds. I [G is CN, NO2, etc.; R1 is halogeno, etc.; R2 is halogeno, optionally substituted amino, etc.; and R8 and R10 are each independently hydrogen, halogeno, or alkyl] are prepd. Processes for prepg. I are disclosed. Compds. of this invention at 50 mg/kg orally gave statistically significant decreases of blood sugar in diabetic mice.

IT 429694-97-3P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of preventive or therapeutic medicines for diabetes contg. fused-heterocycle compds. or their salts)

RN 429694-97-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-2,5bis(methylthio)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:283039 CAPLUS

DOCUMENT NUMBER: 137:140450

TITLE: New oxidation-reduction transformation of derivatives

of 1,10b-dihydro-1H-pyrazolo[1,5-c]-1,3-benzoxazine and 7,12-dihydro-6H-[1]benzopyrano[4,3-d]-1,2,4-

triazolo[1,5-a]pyrimidine

AUTHOR(S): Desenko, S. M.; Chernenko, V. N.; Orlov, V. D.;

Musatov, V. I.

CORPORATE SOURCE: Institute for Monocrystals, National Academy of

Sciences of Ukraine, Kharkov, 61001, Ukraine

SOURCE: Chemistry of Heterocyclic Compounds (New York, NY,

United States) (Translation of Khimiya

Geterotsiklicheskikh Soedinenii) (2001), 37(10),

1312-1313

CODEN: CHCCAL; ISSN: 0009-3122 Kluwer Academic/Consultants Bureau

PUBLISHER: Kluwer DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:140450

AB Oxidn.-redn. transformation of derivs. of 1,10b-dihydro-1H-pyrazolo[1,5-c]-

1,3-benzoxazine and 7,12-dihydro-6H-[1]benzopyrano[4,3-d]-1,2,4-

triazolo[1,5-a]pyrimidine was investigated. E.g., treating

1,10b-dihydro-1H-pyrazolo[1,5-c]-1,3-benzoxazine with KOH in DMSO-DMF gave

reductive opening of the ring and dehydrogenation of the fragment.

IT 381679-46-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(oxidn.-redn. transformation of derivs. of 1,10b-dihydro-1H-

pyrazolo[1,5-c]-1,3-benzoxazine and 7,12-dihydro-6H-[1]benzopyrano[4,3-

d]-1,2,4-triazolo[1,5-a]pyrimidine)

RN 381679-46-5 CAPLUS

CN Phenol, 2-(6-methyl-7-phenyl[1,2,4]triazolo[1,5-a]pyrimidin-5-yl)- (9CI) (CA INDEX NAME)

OH N N N

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 110 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:31452 CAPLUS

DOCUMENT NUMBER:

136:96032

TITLE:

INVENTOR(S):

Substituted triazolopyrimidines as anticancer agents Schmitt, Mark R.; Kirsch, Donald R.; Harris, Jane E.;

Beyer, Carl F.; Pees, Klaus-Juergen; Carter, Paul;

Pfrengle, Waldemar; Albert, Guido

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 405 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA	PATENT NO.				ND I	DATE			A.	PPLI	CATI	ои ис	ο.	DATE			
						<del>-</del>	<b>-</b>		-								
WO	2002	0025	63	A:	2	2002	0110		W	0 20	01-U	S206'	72	2001	0628		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
				•			•	-			-						
	LS, L																
	RO, R				SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UΖ,
	RO, R VN, Y				ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM			
	RW:													ΑT,			
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	ΝL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG		
AU	2001	0730	62	A!	5 :	2002	0114		A	U 20	01-7	3062		2001	0628		
US	AU 2001073062 US 2002068744				1 :	2002	0606		U	S 20	01-8	9597	5	2001	0629		
PRIORIT	Y APP	LN.	INFO	.:				1	US 2	000-	2155	85P	P	2000	0630		
								1	WO 2	001-1	US20	672	W	2001	0628		

## OTHER SOURCE(S): MARPAT 136:96032

AB A method is provided for treating or inhibiting the growth of cancerous tumor cells and assocd. diseases in a mammal in need thereof which comprises administering to the mammal an effective amt. of a substituted triazolopyrimidine deriv. or a pharmaceutically acceptable salt thereof. Also provided is a method for treating or inhibiting the growth of cancerous tumor cells and assocd. diseases in a mammal in need thereof by interacting with tubulin and microtubules and promoting microtubule polymn. which comprises administering to the mammal an effective amt. of a substituted triazolopyrimidine deriv. or a pharmaceutically acceptable salt thereof.

## IT 187233-89-2

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (triazolopyrimidine derivs. as anticancer agents)

RN 187233-89-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5-chloro-7-(hexahydro-1H-azepin-1-yl)-6-phenyl- (9CI) (CA INDEX NAME)

L3

09/ 895,975

ACCESSION NUMBER: 2002:29417 CAPLUS

DOCUMENT NUMBER: 136:325484

TITLE: A mild and efficient synthesis of new benzimidazole

derivatives via a one-pot reaction. An addition versus

condensation reaction

AUTHOR(S): El Latif, Fawi M. Abd; Khalil, Mohamed A.; Helmy,

Islam; Solieman, Hausien A.

CORPORATE SOURCE: Chemistry Department, Faculty of Science, South Valley

University, Aswan, Egypt

SOURCE: Heterocyclic Communications (2001), 7(5), 485-492

CODEN: HCOMEX; ISSN: 0793-0283 Freund Publishing House Ltd.

PUBLISHER: Freund Publ.
DOCIMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

New polyfunctional benzimidazole derivs. of pharmaceutical interest were prepd. starting from 2-cyanomethylbenzimidazole-2,2-dicarboxaldehyde, which reacts easily with different active methylene compds. and nucleophilic reagents. The addn. predominantly lead to the cyclic products in competition with the condensation reaction.

IT 392665-67-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(one-pot prepn. of benzimidazoles)

RN 392665-67-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:779593 CAPLUS

DOCUMENT NUMBER: 136:167348

TITLE: Synthesis of polycyclic nitrogen-containing

heterocyclic [1]: one pot formation of 1,6-naphthyridine ring system by reaction of

amino-cyano-methylthio-heterocycles with dialkyl

acetylenedicarboxylates

AUTHOR(S): Tominaga, Yoshinori; Nomoto, Kenichi; Yoshioka, Noriko

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Nagasaki

University, Nagasaki, 852-8521, Japan

SOURCE: Journal of Heterocyclic Chemistry (2001), 38(5),

1135-1141

CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal LANGUAGE: English

AB Reaction of 3-amino-3-methylthio-2-cyanoacrylonitrile

[[amino(methylthio)methylene]propanedinitrile] with excess di-Me acetylenedicarboxylate(DMAD) in the presence of potassium carbonate in

DMSO gave a novel tricyclic heterocycle, hexamethyl 1H-1,4,7-

triazaphenalene-2,3,5,6,8,9-hexacarboxylate [I; 1H-pyrido[2,3,4-de][1,6]naphthyridine-2,3,5,6,8,9-hexacarboxylic acid hexamethyl ester].

When one equiv. of DMAD was used in this reaction, 4-amino-5-cyano-6-

(methylthio) -2,3-Pyridinedicarboxylic acid di-Me ester, a key intermediate of I, was obtained. The compds. thus prepd. included derivs. of 1H-pyrimido[4,5,6-de][1,6]naphthyridine, 1H-[1,2,4]triazolo[1',5':1,2]pyri mido[4,5,6-de][1,6]naphthyridine, 4H-pyrazolo[1',5':1,2]pyrimido[4,5,6de][1,6]naphthyridine, 4H-pyrazolo[1',5':1,6]pyrido[4,3,2de][1,6]naphthyridine and 4H-pyrido[2,3,4-de]pyrimido[4,5b] [1,6] naphthyridine. 98190-26-2, 7-Amino-5-(methylthio)[1,2,4]triazolo[1,5-a]pyrimidine-IT 6-carbonitrile RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of fused naphthyridine derivs. from acetylenedicarboxylates and [amino(methylthio)methylene]propanedinitrile) 98190-26-2 CAPLUS RN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-5-(methylthio)-CN (CA INDEX NAME) (9CI)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:779591 CAPLUS

DOCUMENT NUMBER:

136:200155

TITLE:

Synthesis of pyrazolo[1,5-a]-, 1,2,4-triazolo[1,5-a]- and imidazo[1,2-a]pyrimidines related to zaleplon, a

new drug for the treatment of insomnia

AUTHOR(S):

Mustazza, Carlo; Del Giudice, Maria Rosaria; Borioni,

Anna; Gatta, Franco

CORPORATE SOURCE:

Laboratorio di Chimica del Farmaco, Istituto Superiore

di Sanita, Rome, 00161, Italy

SOURCE:

Journal of Heterocyclic Chemistry (2001), 38(5),

1119-1129

CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER:

HeteroCorporation

DOCUMENT TYPE:

Journal

LANGUAGE:

Journal English

The prepn. of some pyrazolo[1,5-a]-, 1,2,4-triazolo[1,5-a]- and imidazo[1,2-a]-pyrimidines substituted on the pyrimidine moiety by a 4-[(N-acetyl-N-ethyl)amino]phenyl group is described. A new synthesis of related benzo[h]pyrazolo[1,5-a]-, benzo[h]pyrazolo[5,1-b]- and benzo[h]1,2,4-triazolo[1,5-a]-quinazolines is also reported.

IT 400759-49-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of pyrazolo[1,5-a]-, 1,2,4-triazolo[1,5-a]- and imidazo[1,2-a]pyrimidines and benzopyrazolo- and

benzotriazoloquinazolines)

RN 400759-49-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-[4-(acetylethylamino)phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 110 CAPLUS COPYRIGHT 2003 ACS 1.3

ACCESSION NUMBER:

2001:620091 CAPLUS

DOCUMENT NUMBER:

135:344441

TITLE:

Fluoro-containing heterocycles. V. Cyclization of

3-azolylamino-2-polyfluorobenzoylacrylates

AUTHOR(S):

Lipunova, G. N.; Nosova, E. V.; Kodess, M. I.;

Charushin, V. N.; Rozin, Yu. A.; Chasovskikh, O. M.

CORPORATE SOURCE:

Ural State Technical University, Yekaterinburg,

620002, Russia

SOURCE:

AR

Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2001), 37(4), 570-576

CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER:

MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE:

Journal English

LANGUAGE:

Heating Et 3-azolylamino-2-polyfluorobenzoylacrylates in acetonitrile in the presence of KF yielded derivs. of 1-azolyl-substituted quinolones or

azolo[1,5-a]pyrimidines. IT 371249-10-4P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of fluoro-contg. 1-azolyl-substituted quinolones or azolo[1,5-a]pyrimidines)

RN371249-10-4 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-(2,3,4,5-CN tetrafluorophenyl) -, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 09/895,975

L3 ANSWER 12 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:541845 CAPLUS

DOCUMENT NUMBER: 135:129598

TITLE: Silver salt diffusion transfer lithographic plate

INVENTOR(S): Tanabe, Osami

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2001201858 A2 20010727 JP 2000-11974 20000120

PRIORITY APPLN. INFO.: JP 2000-11974 20000120

The material comprises (A) .gtoreq.1 photosensitive Ag halide emulsion layer contg. Ag halide grains and (B) a phys. development nuclei layer .gtoreq.1 of which contains .gtoreq.1 5- or 6-membered ring arom. compd. on .gtoreq.1 side of a support. The above Ag halide grains are characterized by (1) contg. .gtoreq.1 heavy metal selected from Ir, Ru, Rh, Re, Os, and Cr at 1.0 .times. 10-7 to 1.0 .times. 10-3 mol/mol Ag halide; (2) being sensitized with Au and S after their formation under acid conditions; and (3) contg. AgCl .gtoreq.80 mol%, showing non-orthochromaticity. The material shows high sensitivity to blue laser and high yield of transferred Ag, and improved storage stability, providing a printing plate with improved durability.

IT 3135-09-9

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(diffusion-transfer lithog. plate contg. heterocyclic compd.)

RN 3135-09-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-5-oxo-(9CI) (CA INDEX NAME)

L3 ANSWER 13 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:535146 CAPLUS

DOCUMENT NUMBER: 133:135324

TITLE: Preparation of 7-aminopyrazolo[1,5-a]pyrimidine and 7-amino-1,2,4-triazolo[1,5-a]pyrimidine derivatives as

7-amino-1,2,4-criazolo[1,5-a]pyrimidine derivach

fat accumulation inhibitory agents

INVENTOR(S): Ohtsubo, Tsuguteru; Murakami, Hiroko

PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan; Sumitomo

Pharmaceuticals Company, Limited

SOURCE: PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO. DATE
      PATENT NO.
                          KIND DATE
      _____
                                  -----
                                                     _____
                                                    WO 2000-JP462
                                                                          20000128
      WO 2000044754
                                  20000803
                          A1
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
               CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, DV, KG, KZ, MD, DH, TI, TM
                BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
                DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
                CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                 20011031 EP 2000-901971 20000128
      EP 1149835
                           A1
               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, SI, LT, LV, FI, RO
                                                 JP 1999-22357
                                                                    A 19990129
PRIORITY APPLN. INFO.:
                                                 WO 2000-JP462
                                                                      W 20000128
                              MARPAT 133:135324
OTHER SOURCE(S):
GI
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AB Aminopyrimidine derivs. represented by general formula (I; wherein R1 represents hydrogen, (un) substituted alkyl, alkenyl, aryl, aralkyl, or heterocyclyl; R2 and R3 represent each hydrogen, halogeno, (un) substituted alkyl, alkenyl, aryl, aralkyl, or heterocyclyl; or R2 and R3 are combined together to represents C3-10 alkylene; R5 represents hydrogen, (un)substituted alkyl or alkenyl; R6 represents C1-12 alkyl, (un) substituted C2-12 alkenyl, acyl, etc.; and X represents nitrogen, CR4; wherein R4 represents hydrogen, halogeno, (un) substituted alkyl, alkenyl, aryl, or aralkyl) are prepd. Theses compds. inhibit fat accumulation in fat cells and, therefore, are efficacious in preventing and treating various diseases in assocn. with enlargement of fat tissues, e.g. obesity, diabetes, and hyperlipidemia. Thus, 7-chloro-5,6-dimethyl-1,2,4triazolo[1,5-a]pyrimidine and 2-(2,4-dimethylphenoxy)ethylamine were stirred with Et3N in toluene at 100.degree. for 3 h to give N-[2-(2,4-dimethylphenoxy)ethyl]-5,6-dimethyl-1,2,4-triazolo[1,5a) pyrimidin-7-amine (II). II and 5,6-dimethyl-N- $\{2-[4-(1-methyl-1-methyl-1-methyl-n-meth$ phenylethyl)phenoxy]ethyl}-1,2,4-triazolo[1,5-a]pyrimidin-7-amine inhibited accumulation of fat mesenteric fat tissue by 51 and 83%, resp. IT

286428-34-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 7-aminopyrazolo[1,5-a]pyrimidine and 7-amino-1,2,4-triazolo[1,5-a]pyrimidine derivs. as fat accumulation inhibitory agents)

RN 286428-34-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-5-amine, N-[2-(2,4-dimethylphenoxy)ethyl]-6,7-dimethyl-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:398307 CAPLUS

DOCUMENT NUMBER: 133:120397

TITLE: Synthesis and properties of novel .alpha.-(s-

triazolo[1,5-a]pyrimidin-2-yloxy)benzylphosphonate

derivatives

AUTHOR(S): Yang, Guangfu; Liu, Zuming; Liu, Jianchao; Yang,

Huazheng

CORPORATE SOURCE: Institute of Organic Synthesis, Central China Normal

University, Wuhan, 430079, Peop. Rep. China

SOURCE: Heteroatom Chemistry (2000), 11(4), 313-316 CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB In an attempt to discover novel compds. with high activity and low toxicity, new phosphonate derivs. contg. triazolo[1,5-a]pyrimidine moieties were designed and synthesized by a nucleophilic substitution between .alpha.-hydroxybenzylphosphonates and 2-methanesulfonyl-s-triazolo[1,5-a]pyrimidines. The structures of all compds. prepd. were confirmed by elemental analyses and by NMR and MS spectroscopy. The results of preliminary bioassay indicate that the title compds. possess certain selective herbicidal activity against rape and also, to some extent, inhibit of acetolactase synthase activity.

IT 250674-93-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and herbicidal and ALS inhibiting activity of triazolopyrimidinyloxybenzylphosphonates)

RN 250674-93-2 CAPLUS

CN Phosphonic acid, [(4-methylphenyl)[(5,6,7-trimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)oxy]methyl]-, diethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/ 895,975

ACCESSION NUMBER:

2000:378775 CAPLUS

DOCUMENT NUMBER:

133:150512

TITLE:

Syntheses and properties of new herbicidal

2-arylthio-1,2,4-triazolo[1,5-a]pyrimidine derivatives

AUTHOR (S):

Yang, Guang-Fu; Lu, Rong-Jian; Fei, Xue-Ning; Yang,

Hua-Zhen

CORPORATE SOURCE:

Institute of Pesticide Chemistry, Central China Normal

University, Hubei, 430079, Peop. Rep. China

SOURCE:

Chinese Journal of Chemistry (2000), 18(3), 435-440

CODEN: CJOCEV; ISSN: 1001-604X

PUBLISHER:

Science Press

DOCUMENT TYPE:

Journal

LANGUAGE:

English

In search of novel herbicides with high activity, a series of AB 2-arylthio-1,2,4-triazolo[1,5-a]pyrimidines were synthesized by cyclization of -5-amino-3-arylthio-1,2,4-triazoles with 1,3-diketones or by the nucleophilic substitution of substituted thiophenols with 2-methylsulfonyl-1,2,4-triazolo[1,5-a]pyrimidine. The structures of all compds. prepd. were confirmed by 1H NMR and MS spectroscopy along with elemental analyses. Preliminary bioassays indicated that some of the products had good herbicidal activity against rape. In addn., the regioselectivity in the reaction of 5-amino-3-substituted arylthio-1,2,4-triazoles with benzoylacetone was studied.

IT 287728-43-2P

> RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of herbicidal 2-arylthio-1,2,4-triazolo[1,5-a]pyrimidines)

287728-43-2 CAPLUS RN

> [1,2,4]Triazolo[1,5-a]pyrimidine, 2-[[2,6-dinitro-4-(trifluoromethyl)phenyl]thio]-5,6,7-trimethyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:318168 CAPLUS

DOCUMENT NUMBER:

133:73998

TITLE:

CN

Synthesis and transformation of 2-thioxopyrimido[4,5-

d]pyrimidines

AUTHOR (S):

Shaker, Rafat M.

CORPORATE SOURCE:

Chemistry Department, Faculty of Science, El-Minia

University, El-Minia, Egypt

SOURCE:

Phosphorus, Sulfur and Silicon and the Related

Elements (2000), 158, 9-16

CODEN: PSSLEC; ISSN: 1042-6507

PUBLISHER:

Gordon & Breach Science Publishers

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Synthesis of bicyclic system pyrimido[4,5-d]pyrimidines and its S-monoand unsym. S,S'-di-substituted derivs. are described.

IT 92673-40-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and transformation of 2-thioxopyrimido[4,5-d]pyrimidines) RN92673-40-0 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-amino-, ethyl ester CN (9CI) (CA INDEX NAME)

ANSWER 17 OF 110 CAPLUS COPYRIGHT 2003 ACS

2000:310884 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 133:89496

TITLE: Heterocyclic synthesis via enaminonitriles: an

efficient, one step synthesis of some novel

azolo[1,5-a]pyrimidine, pyrimido[1,2-a]benzimidazole, pyrido[1,2-a]benzimidazole, pyrimidine and pyrazole

derivatives

AUTHOR(S): Al-Afaleq, Eljazi I.

Chemistry Department, Girls College of Science, CORPORATE SOURCE:

Dammam, 31113, Saudi Arabia

SOURCE: Synthetic Communications (2000), 30(11), 1985-1999

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:89496 GI

Ι

AB Novel p-chlorobenzyl substituted pyrazolo[1,5-a]pyrimidines, a 1,2,4-triazolo[1,5-a]pyrimidine, and a pyrimido[1,2-a]benzimidazole were synthesized by reacting 3-(4-chlorophenyl)-2-(N,N-dimethylamino)methylene-3-oxopropanenitrile (I) with 5-amino-3- and/or 4-substituted-1H-pyrazoles, 3-amino-1,2,4-triazole and 2-aminobenzimidazole. The reaction of I with 1H-benzimidazol-2-ylacetonitrile afforded the p-chlorobenzyl substituted pyrido[1,2-a]benzimidazole. The reaction of I with guanidine, hydrazine, and Ph hydrazine afforded p-chlorobenzoyl substituted pyrimidine and pyrazole compds. However, the reaction of I with hydroxyl amine did not afford the expected isoxazole.

IT 281665-60-9P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of nitrogen arom. heterocycles via Michael addn. of p-chlorobenzyl substituted enaminonitriles)

RN 281665-60-9 CAPLUS

CN [1,2,4] Triazolo [1,5-a] pyrimidine-6-carbonitrile, 7-(4-chlorophenyl) - (9CI) (CA INDEX NAME)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:136747 CAPLUS

DOCUMENT NUMBER: 132:293730

TITLE: Enaminonitriles in heterocyclic synthesis: New routes

for the synthesis of some novel azolo[1,5-a]pyrimidine, pyrimido[1,2-a]benzimidazole,

pyrido[1,2-a]benzimdazole, pyrazolo[3,4-b]pyridine,

pyrazole and pyrimidine derivatives

AUTHOR(S): Al-Zaydi, Khadijah Mohamed; Al-Shiekh, Mariam Abd

Alha; Hafez, Ebtisam Abdel-Aziz

CORPORATE SOURCE: Dep. Chem., Coll. Girls Education, Jeddah, 21481,

Saudi Arabia

SOURCE: Journal of Chemical Research, Synopses (2000), (1),

13-15, 173-192

CODEN: JRPSDC; ISSN: 0308-2342

PUBLISHER: Science Reviews Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:293730

GΙ

AB The synthesis of several new azolo[1,5-a]pyrimidines, pyrimido[1,2-a]benzimidazoles, pyrazolo[3,4-b]pyridines, pyrido[1,2-a]benzimidazoles, pyrazoles, and pyrimidines was reported. Thus, cyclocondensation of the enaminonitriles ArCOC(C.tplbond.N):CHNMe2 (I; Ar = Ph, 4-MeC6H4) with the aminopyrazoles II (R = H, Me) gave the pyrazolopyrimidinecarbonitriles III. Similarly, cyclization of I with 2-(cyanomethyl)benzimidazole gave the dicyanopyridobenzimidazoles IV.

IT 264927-73-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of fused-ring heterocycles via cyclocondensation reactions of (dimethylamino) benzoylacrylonitriles with heterocyclic amines)

RN 264927-73-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1999:639802 CAPLUS

DOCUMENT NUMBER:

131:351381

TITLE:

Synthesis and herbicidal activity of novel .alpha.-(1,2,4-triazolo[1,5-a]pyrimidin-2-

yloxy) benzylphosphonates

AUTHOR (S):

Yang, Guangfu; Yang, Huazheng

CORPORATE SOURCE:

Institute of Organic Synthesis, Central China Normal

University, Wuhan, 430079, Peop. Rep. China

SOURCE:

Heterocyclic Communications (1999), 5(4), 355-358

CODEN: HCOMEX; ISSN: 0793-0283

PUBLISHER:

Freund Publishing House Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Some novel phosphonate derivs. contg. triazolo[1,5-a]pyrimidine moieties were synthesized in good yields by the nucleophilic substitution between .alpha.-hydroxybenzylphosphonates and 2-methanesulfonyl-1,2,4-triazolo[1,5-a]pyrimidines. The results of preliminary bioassay indicates that the title compds. possess selective herbicidal activity.

IT 250674-93-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and herbicidal activity of triazolopyrimidinyloxybenzylphosphon ates)

RN 250674-93-2 CAPLUS

CN Phosphonic acid, [(4-methylphenyl)[(5,6,7-trimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)oxy]methyl]-, diethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 20 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:529149 CAPLUS

DOCUMENT NUMBER: 131:170358

TITLE: Preparation of 7-alkyltriazolopyrimidines as selective

agrochemical fungicides

INVENTOR(S): Pfrengle, Waldemar; Pees, Klaus-Juergen; Albert, Guido

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.				ND	DATE				APPLI				DATE			
WO	9941	255		 A:	 1	 1999	0819							1999	0209		
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	, IN,	IS,	JP,	ΚE,
		KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,
		MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,
		TT,	UA,	UG,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
US	6020	338		Α		2000	0201		Ü	IS 19	99-24	4385	1	1999	0203		
CA	2320	304		Αž	A	1999	0819		C	A 19	99-2	3203	04	1999	0209		
AU	9925	952		A:	1	1999	0830		P	U 19	99-2	5952		1999	0209		
AU	7504	89		B	2	2002	0718										
BR	9907	863		Α		2000	1024		Е	R 19	99-7	863		1999	0209		
EP	1054	888		A.	1	2000:	1129		E	P 19	99-90	0590	5	1999	0209		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	NL,	SE,	PT,	ΙE,	SI,
		FI,	RO														
JP	2002	50366	54	T	2	20020	0205		J	P 20	00-53	31448	3	1999	0209		
PRIORITY	APP:	LN.	INFO	. :				1	JS 1	998-	22288	3	Α	1998	0211		
								1	JS 1	999-	2438	51	Α	1999	0203		
										999-1	US280	80	W	1999	0209		
OTHER SO	URCE	(s):			MAR	PAT :	131:3	1703	58								

$$\begin{array}{c|c}
L^{1} & L^{2} \\
R^{1} & L^{3} \\
N & X & L^{5}
\end{array}$$

GI

AB The title compds. [I; R1 = (un) substituted alk(en)yl, alkynyl, alkadienyl, aryl, or cycloalk(en)yl in which 1 CH2 group may be replaced by 0, S or NR2; R2 = H, alkyl; X = H, halo, OH, (halo)alkoxy, aryloxy, cyano, amino, etc.; L1-L5 = H, halo, (un) substituted alkyl, (un) substituted alkoxy, NO2, cyano] were prepd. The new compds. are processed with carriers and, optionally, adjuvants, to afford fungicidal compns., useful in agricultural applications. For example, suspending 0.96 g Cu iodide in 25 mL THF under inert atm., cooling the suspension to -70.degree., adding 5

mL of n-hexyllithium soln. (2 M, in hexanes), stirring the mixt. for 45 min, adding a soln. of 1.6 g 5,7-dichloro-6-(2-chloro-6-fluorophenyl)-1,2,4-triazolo[1,5a]pyrimidine in 10 mL THF, and stirring the whole for 15 min at -70.degree. gave 0.75 g 5-chloro-7-n-hexyl-6-(2-chloro-6-fluorophenyl)-1,2,4-triazolo[1,5a]pyrimidine (m. 55-57.degree.) which inhibited mycelial growth of Leptosphaeria nodorum with MIC 12.5 .mu.g/mL. Emulsion and suspension conc., wettable powder and H2O-dispersible granule formulations contg. I (R1 = cyclohexyl, L1 = L3 = L5 = F, L2 = L4 = H, X = Cl) were given.

IT 238743-89-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 7-alkyltriazolopyrimidines as selective agrochem. fungicides)

RN 238743-89-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 7-butyl-5-chloro-6-phenyl- (9CI) (CF INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:277496 CAPLUS

DOCUMENT NUMBER: 130:344986

TITLE: Silver halide photographic material containing

azaindene compound with hydroxylamine group

INVENTOR(S): Taniguchi, Masato; Ikeda, Hideo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 11119369 A2 19990430 JP 1997-303377 19971020

PRIORITY APPLN. INFO.: JP 1997-303377 19971020

OTHER SOURCE(S): MARPAT 130:344986

AB The title material, possessing .gtoreq.1 Ag halide emulsion layer on a support, contains a tri-, tetra- or penta-azaindene compd. substituted by a group NR11OH (R11= H, alkyl, aryl, heterocyclic group). The material shows excellent storage stability under high temp. and low moisture conditions and is independent of the elapse of time of the processing solns. used. in the photog. properties.

IT 224564-71-0

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(photog. film contg. azaindene compd. with hydroxylamine group)

RN 224564-71-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxamide, N-[3-[2,4-bis(1,1-

dimethylpropyl)phenoxy]propyl]-7-(hydroxyamino)- (9CI) (CA INDEX NAME)

L3 ANSWER 22 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1999:177032 CAPLUS

DOCUMENT NUMBER:

130:267399

TITLE:

Heterocyclic synthesis via enaminonitriles: One-pot synthesis of some new pyrazole, isoxazole, pyrimidine,

pyrazolo[1,5-a]pyrimidine, pyrimido[1,2-

a]benzimidazole and pyrido[1,2-a]benzimidazole

derivatives

AUTHOR (S):

Dawood, Kamal M.; Farag, Ahmad M.; Kandeel, Zaghloul

Ε.

CORPORATE SOURCE:

Faculty of Science, Department of Chemistry, Cairo

University, Giza, 12613, Egypt

SOURCE:

Journal of Chemical Research, Synopses (1999), (2),

88-89, 537-547

CODEN: JRPSDC; ISSN: 0308-2342 Royal Society of Chemistry

PUBLISHER: DOCUMENT TYPE:

Journal

DOCOMENT

English

LANGUAGE:
OTHER SOURCE(S):

CASREACT 130:267399

GΙ

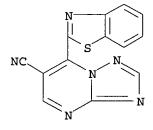
AB A convenient synthesis of some new pyrazole, isoxazole, pyrimidine, pyrazolo[1,5-a]pyrimidine, pyrimido[1,2-a]benzimidazole and pyrido[1,2-a]benzimidazole derivs., e.g., I, is reported.

IT 222314-76-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of heterocyclic compds. by cyclization of enaminonitrile with nitrogen nucleophiles)

RN 222314-76-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-(2-benzothiazoly1)-(9CI) (CA INDEX NAME)



REFERENCE COUNT:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS 14 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 23 OF 110 CAPLUS COPYRIGHT 2003 ACS T.3

ACCESSION NUMBER:

1999:104638 CAPLUS

DOCUMENT NUMBER:

130:248286

TITLE:

Comparative molecular field analysis of triazolopyrimidine sulfonanilide herbicides

AUTHOR (S):

Ren, Tian-Rui; Chen, Hong-Ming; Xie, Gui-Rong; Zhou,

Jia-Ju; Chen, Fu-Heng

CORPORATE SOURCE:

Institute of Chemical Metallurgy, Chinese Academy of

Sciences, Beijing, 100080, Peop. Rep. China

SOURCE:

Gaodeng Xuexiao Huaxue Xuebao (1998), 19(12),

1950-1953

CODEN: KTHPDM; ISSN: 0251-0790 Gaodeng Jiaoyu Chubanshe

PUBLISHER:

Journal

DOCUMENT TYPE:

Chinese

LANGUAGE:

AB

Triazolopyrimidine herbicides are a new kind of high efficiency ones with acetolactate synthase (ALS) as target. Comparative mol. field anal. (COMFA) was applied to study the action mode of triazolopyrimidine herbicides on ALS. The QSAR results give the rational reasons to infer a possible binding mode between the inhibitors and ALS, and help to design new inhibitors.

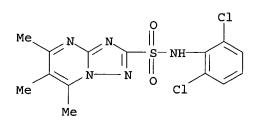
IT 98966-99-5

> RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(structure-activity relationship of triazolopyrimidine sulfonanilide herbicides)

RN 98966-99-5 CAPLUS

CN [1,2,4] Triazolo [1,5-a] pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl)-5,6,7-trimethyl- (9CI) (CA INDEX NAME)



ANSWER 24 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1998:385479 CAPLUS

DOCUMENT NUMBER:

129:54375

TITLE:

Arthropodicidal and fungicidal cyclic amides [triazolones] and their preparation, use, and

compositions

INVENTOR(S): Brown, Richard James; Chan, Dominic Ming-Tak; Howard,

Michael Henry, Jr.; Daniel, Dilon Jancey; Clark, David

Alan; Selby, Thomas Paul

PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE \_ \_ \_ \_ -----WO 9823155 Α1 19980604 WO 1996-US18916 19961126 W: JP, KR RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE ZA 9709943 19990505 ZA 1997-9943 19971105 Α WO 9823156 Α1 19980604 WO 1997-US21944 19971125 W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MP, NE, SN, TD, TG GN, ML, MR, NE, SN, TD, TG AU 9854633 Α1 19980622 AU 1998-54633 19971125 EP 944314 Α1 19990929 EP 1997-948597 19971125 R: CH, DE, DK, ES, FR, GB, IT, LI, NL, IE BR 9713415 Α 20000418 BR 1997-13415 19971125 T2 JP 2001506984 20010529 JP 1998-524889 19971125 MX 9904789 20000131 Α MX 1999-4789 19990524 PRIORITY APPLN. INFO.: WO 1996-US18916 Α 19961126 Р US 1996-33614P 19961219

US 1997-48844P

WO 1997-US21944

Ρ

W

19970606

19971125

OTHER SOURCE(S): MARPAT 129:54375

GI

Title compds. I and their N-oxides and agriculturally suitable salts are disclosed [wherein E = (un)substituted 1,2-phenylene, naphthalene or heterocyclyl; A = O, S, N, NR3 or CR4; G = C or N; when G is C, then A is O, S or NR3 and the floating double bond is attached to G; and when G is N, than A is N or CR4 and the floating double bond is attached to A; W = O, S, NH, N(C1-C6 alkyl) or NO(C1-C6 alkyl); X = H, OR1, SOmR1, halo, C1-C6 alkyl, C1-C6 haloalkyl, C3-C6 cycloalkyl, cyano, NH2, NHR1, N(C1-C6

alkyl)R1,  $NH(C1-C6 \ alkoxy)$  or  $N(C1-C6 \ alkoxy)R1$ ; R2 = H,  $C1-C6 \ alkyl$ , C1-C6 haloalkyl, C2-C6 haloalkyl, C2-C6 alkenyl, C2-C6 haloalkenyl, C2-C6 alkynyl, C2-C6 haloalkynyl, C3-C6 cycloalkyl, C2-C4 alkylcarbonyl, C2-C6 alkoxycarbonyl, hydroxy, C1-C2 alkoxy, or acetyloxy; R1= (halo)alkyl, (halo)alkenyl, etc.; R3 = H, (halo)alkyl, etc.; Y = O, CO, SO, etc.; Z = O(un) substituted alkyl, alkenyl or alkynyl, R4 = H, halo, alkyl, etc.; m = 0, 1 or 2]. Claims cover methods of arthropod and fungal control, novel compds., arthropodicidal and fungicidal compns., and novel intermediates. Approx. 1000 invention compds. were prepd. For instance, 5-chloro-2,4-dihydro-4-(2-methoxyphenyl)-2-methyl-3H-1,2,4-triazol-3-one (prepn. given) underwent a sequence of cleavage of the Me ether with BBr3, methoxylation of the chloride with NaOMe, and etherification of the phenolic hydroxy group with 5-chloro-3-[3,5-bis(trifluoromethyl)phenyl]-1,2,4-thiadiazole, to give title compd. II. Selected I were active in screens against Erysiphe graminis, Pyricularia oryzae, Spodoptera frugiperda, Tetranychus urticae, and a variety of other std. pests.

IT 186978-67-6P

CN

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. as arthropodicide and fungicide)

186978-67-6 CAPLUS RN

> 3H-1,2,4-Triazol-3-one, 5-chloro-4-[2-[[(5,7-dimethyl-6phenyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)thio]methyl]phenyl]-2,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 25 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:465087 CAPLUS

DOCUMENT NUMBER:

127:81462

TITLE:

Preparation of triazolopyrimidine derivatives as ACAT

inhibitors

INVENTOR (S):

Sato, Masakazu; Mannaka, Akira; Takahashi, Keiko;

Tomizawa, Kazuyuki

PATENT ASSIGNEE(S): SOURCE:

Taisho Pharmaceutical Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09169763	A2	19970630	JP 1995-333247	19951221
PRIORITY APPLN. INFO.	:		JP 1995-333247	19951221

OTHER SOURCE(S):

MARPAT 127:81462

GI

HNCOASR1

R2

N

N

Ι

AB The title compds. (I; X = ASR1; A = C1-4 alkylene; R1 = C1-20 alkyl; R2 = H, C1-4 alkyl; R3 = Me, morpholino) are prepd. I, possessing Acyl-CoA Cholesterolacyltransferase (ACAT) inhibitory activity, are useful as lipid lowering agents and arteriosclerosis remedies. Thus, Me(CH2)13SH was treated with NaH and then reacted with I (X = CMe2Br, R2 = Me, R3 = morpholino) (prepn. given) to give the title compd. I [X = CMe2S(CH2)13Me, R2 = Me, R3 = morpholino], which showed IC50 of 6.05 X 10-6 M against ACAT when tested with rabbits.

IT 191655-89-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of triazolopyrimidine derivs. as ACAT inhibitors)

RN 191655-89-7 CAPLUS

CN Acetamide, N-(5,6-dimethyl[1,2,4]triazolo[1,5-a]pyrimidin-7-yl)-2-(tetradecylthio)- (9CI) (CA INDEX NAME)

Me- 
$$(CH_2)_{13}$$
-s- $CH_2$ -C-NH

Me

N

N

L3 ANSWER 26 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:330904 CAPLUS

DOCUMENT NUMBER: 127:50602

TITLE: Functionalized azoles and triazolo[1,5-a]pyrimidines

as latent leishmanicides

AUTHOR(S): Ram, Vishnu Ji; Srivastava, Pratibha; Singh, Sunil K.;

Kandpal, Mamta; Tekwani, B.L.

CORPORATE SOURCE: Medicinal Chemistry Division, Central Drug Research

Institute, Lucknow, 226001, India

SOURCE: Bioorganic & Medicinal Chemistry Letters (1997), 7(8),

1087-1090

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

GT

$$H_2N$$
 $O_2SN$ 
 $X$ 
 $R$ 
 $II$ 

Triazolo[1,5-a] pyrimidines, e.g., I, benzoxazoles II (R = H, Me; X = O), and benzimidazole II (R = H, X = NH) have been synthesized and evaluated AB for their in vitro leishmanicidal activity against L. donovani promastigotes.

IT 190962-50-6P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and leishmanicidal activity of triazolopyrimidines and azoles)

RN190962-50-6 CAPLUS

CNBenzenesulfonamide, N-(7-amino-6-cyano[1,2,4]triazolo[1,5-a]pyrimidin-2yl)-4-chloro- (9CI) (CA INDEX NAME)

ANSWER 27 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:168566 CAPLUS

DOCUMENT NUMBER:

126:153997

TITLE:

Preparation of arthropodicidal and fungicidal cyclic

INVENTOR(S):

Brown, Richard James; Chan, Dominic Ming-Tak; Howard, Michael Henry, Jr.; Daniel, Dilon Jancey; Clark, David

Alan; Selby, Thomas Paul

PATENT ASSIGNEE(S):

E.I. Du Pont De Nemours and Company, USA; Brown,

Richard James; Chan, Dominic Ming-Tak; Howard, Michael Henry, Jr.; Daniel, Dilon Jancey; Clark, David Alan;

Selby, Thomas Paul

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----WO 9700612 19970109 Α1 WO 1996-US10326 19960613

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W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS,
             JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ,
             PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ,
             BY, KG
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
    AU 9661770
                       A1
                            19970122
                                           AU 1996-61770
                                                             19960613
     EP 836384
                       A1
                            19980422
                                           EP 1996-919422
                                                             19960613
         R: DE, FR, GB, IT
     CN 1188394
                            19980722
                                           CN 1996-194937
                       Α
                                                             19960613
     BR 9609001
                            19990629
                                           BR 1996-9001
                       Α
                                                             19960613
     JP 11508257
                                           JP 1996-503876
                       T2
                            19990721
                                                             19960613
     ZA 9605196
                            19971219
                                           ZA 1996-5196
                       Α
                                                             19960619
PRIORITY APPLN. INFO.:
                                        US 1995-341P
                                                         Ρ
                                                             19950620
                                        WO 1996-US10326 W 19960613
OTHER SOURCE(S):
                       MARPAT 126:153997
GI
```

Ι

Prepn. and title uses are given for I [E = (un)substituted 1,2-phenylene, naphthalene or heterocyclyl; A = 0, S, N, NR3 or CR4; G = C or N; when G is C, then A is O, S or NR3 and a the floating double bond is attached to G; and when G is N, than A is N or CR4 and the floating double bond is attached to A; W = O, S, NH, N(C1-C6 alkyl) or NO(C1-C6 alkyl); X = H, OR1, SOmR1, halo, C1-C6 alkyl, C1-C6 haloalkyl, C3-C6 cycloalkyl; cyano, NH2, NHR1, N(C1-C6 alkyl)R1, NH(C1-C6 alkoxy) or N(C1-C6 alkoxy)R1; R2 = H, C1-C6 alkyl, C1-C6 haloalkyl, C2-C6 haloalkyl, C2-C6 alkenyl, C2-C6 haloalkenyl, C2-C6 alkoxycarbonyl, hydroxy, C1-C2 alkoxy or acetyloxy; R1= (halo)alkyl, (halo)alkenyl, etc.; R3= H, (halo)alkyl, etc.; Y = O, CO, SO, etc.; Z = (un)substituted alkyl,alkenyl or alkynyl, R4 = H, halo, alkyl, etc.; m = 0, 1 or 2].

IT 186978-67-6P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. as arthropodicide and fungicide)

RN 186978-67-6 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 5-chloro-4-[2-[[(5,7-dimethyl-6-phenyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)thio]methyl]phenyl]-2,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ &$$

L3 ANSWER 28 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:168548 CAPLUS

DOCUMENT NUMBER:

126:152804

TITLE:

Spironolactone or other epoxy-free spirolactone-type aldosterone receptor antagonist in combination with angiotensin II antagonist for treatment of circulatory and cardiovascular disorders, including congestive

heart failure

INVENTOR(S):

Maclaughlan, Todd E.; Schuh, Joseph R.

PATENT ASSIGNEE(S):

G.D. Searle & Co., USA; Maclaughlan, Todd E.; Schuh,

Joseph R.

SOURCE:

PCT Int. Appl., 210 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FIIGIT

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	TENT :	NO.		KI	ND	DATE			Al	PPLI	CATI	ON NO	ο.	DATE				
	9640 9640								W	19	96-U	S9342	2	1996	0605			
	W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LK,	LR,	LS,	
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	
		SE,	SG															
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA			
CA	2224	222		A	A	1996	1219		C	19	96-2	22422	22	1996	0605			
AU	9661	580		A	1	1996	1230		ΙA	J 19	96-6	1580		1996	0605			
EP	8319	11		A:	2	1998	0401		E	19	96-9	19173	3	1996	0605			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FΙ
CN	1192	696		Α		1998	0909		Cl	1 19	96-1	96086	5	1996	0605			
BR	9608	505		Α		1999	0706		BI	19	96-8	505		1996	0605			
JP	1150	9838		T	2	1999	0831		JI	19	96-50	01683	3	1996	0605			
AT	2162	61		Ε		2002	0515		ΑT	19	96-9	19173	3	1996	0605			
ES	2175	098		$\mathbf{T}$	3	2002	1116		ES	19	96-93	19173	3	1996	0605			
PRIORITY	APP	LN.	INFO.	. :				1	JS 19	95-	4860	39	Α	1995	0607			
								1	WO 19	96-1	US934	12	W	1996	0605			

OTHER SOURCE(S): MARPAT 126:152804

AB A combination therapy is disclosed which comprises a therapeuticallyeffective amt. of an epoxy-free spirolactone-type aldosterone receptor
antagonist and a therapeutically-effective amt. of an angiotensin II
receptor antagonist for treatment of circulatory disorders, including
cardiovascular disorders, e.g. hypertension and congestive heart failure.
Preferred angiotensin II receptor antagonists are those compds. having
high potency and bioavailability and which are characterized in having an

IT

CN

imidazole or triazole moiety attached to a biphenylmethyl or pyridinyl/phenylmethyl moiety. A preferred epoxy-free spirolactone-type aldosterone receptor antagonist is spironolactone. A preferred combination therapy includes the angiotensin II receptor antagonist 5-[2-[5-[(3,5-dibutyl-1H-1,2,4-triazol-1-yl)methyl]-2-pyridinyl]phenyl]-1H-tetrazole and the aldosterone receptor antagonist spironolactone. 186616-16-0, UP 275-22

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(spironolactone or other epoxy-free spirolactone-type aldosterone receptor antagonist in combination with angiotensin II antagonist for treatment of circulatory and cardiovascular disorders, including congestive heart failure)

RN 186616-16-0 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-butyl-6-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 29 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:168547 CAPLUS

DOCUMENT NUMBER: 126:152803

TITLE: Epoxy-steroidal aldosterone antagonist and angiotensin

II antagonist combination therapy for treatment of cardiovascular disorders, including congestive heart

failure

INVENTOR(S): Alexander, John C.; Schuh, Joseph R.; Gorczynski,

Richard J.

PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Alexander, John C.; Schuh,

Joseph R.; Gorczynski, Richard J.

SOURCE: PCT Int. Appl., 218 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
						<del>-</del>			-						- <del>-</del>		
WO	9640	257		A:	1	1996	1219		W	19	96-U	S933	5	1996	0605		
	W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,
		ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LS,
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG														
	RW:	KΕ,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA		
CA	2224	079		Α	A	1996	1219		CZ	A 19	96-22	2240	79	19960	0605		
AU	9661	577		A:	1	1996	1230		Α	J 19	96-63	1577		19960	0605		
ΑU	7256	89		B2	2 .	2000:	1019										
EP	8319	10		A:	1	1998	0401		El	9 19	96-9	1917	)	19960	0605		

EP 831910	B1	20011121		
R: AT, BE,	CH, DE	, DK, ES, FR,	GB, GR, IT, LI, LU	, NL, SE, PT, IE, FI
CN 1192697	Α	19980909	CN 1996-196155	19960605
BR 9609066	Α	19990126	BR 1996-9066	19960605
JP 11507627	T2	19990706	JP 1996-501678	19960605
RU 2166330	C2	20010510	RU 1998-100250	19960605
IL 122242	A1	20010724	IL 1996-122242	19960605
AT 209047	E	20011215	AT 1996-919170	19960605
ES 2167571	Т3	20020516	ES 1996-919170	19960605
NO 9705741	A	19980129	NO 1997-5741	19971205
PRIORITY APPLN. INFO.	:		US 1995-486456 A	19950607
			WO 1996-US9335 W	19960605

OTHER SOURCE(S): MARPAT 126:152803

AB A combination therapy comprising a therapeutically-effective amt. of an epoxy-steroidal aldosterone receptor antagonist and a therapeutically-effective amt. of an angiotensin II receptor antagonist is described for treatment of circulatory disorders, including cardiovascular disorders, e.g. hypertension and congestive heart failure. Preferred angiotensin II receptor antagonists are those compds. having high potency and bioavailability and which are characterized in having an imidazole or triazole moiety attached to a biphenylmethyl or pyridinyl/phenylmethyl moiety. Preferred epoxy-steroidal aldosterone receptor antagonists are 20-spiroxane steroidal compds. characterized by the presence of 9.alpha.,11.alpha.-substituted epoxy moiety. A preferred combination therapy includes the angiotensin II receptor antagonist 5-[2-[5-[(3,5-dibutyl-1H-1,2,4-triazol-1-yl)methyl]-2-pyridinyl]phenyl]-1H-tetrazole and the aldosterone receptor antagonist epoxymexrenone.

IT 186616-16-0, UP 275-22

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(epoxy-steroidal aldosterone antagonist and angiotensin II antagonist combination therapy for treatment of cardiovascular disorders, including congestive heart failure)

RN 186616-16-0 CAPLUS

CN

[1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-butyl-6-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 30 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:168533 CAPLUS

DOCUMENT NUMBER: 126:152800

TITLE: Method to treat cardiofibrosis or cardiac hypertrophy

with a combination of an angiotensin II antagonist and spironolactone or other epoxy-free spirolactone-type

aldosterone receptor antagonist

INVENTOR(S): Mcmahon, Ellen G.; Olins, Gillian M.; Schuh, Joseph R.

PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Mcmahon, Ellen G.; Olins,

Gillian M.; Schuh, Joseph R.

SOURCE:

PCT Int. Appl., 208 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KI	ND	DATE			A.	PPLI	CATI	ON NO	Э.	DATE			
								<b>-</b>		-								
1	WO	9640	256		Α	1	1996	1219		W	0 19	96-U	S882	3	1996	0605		
		W:	AL,	AM,	ΑT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,
	ES, I				GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LS,
	LT, L				LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,
			SE,	SG														
		RW:	KΕ,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
			ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA		
	IE, IT, LU, MC, NL, P AU 9659822 A1 1996123									Αl	U 19	96-5	9822		1996	0605		
PRIOR	PRIORITY APPLN. INFO.:								1	US 1:	995-	4859	35		1995	0607		
	PRIORILI AFFUN. INC								1	WO 1:	996-1	US88:	23		1996	0605		

OTHER SOURCE(S): MARPAT 126:152800

AB A therapeutic method is described for treating cardiofibrosis or cardiac hypertrophy using a combination therapy comprising a therapeutically-effective amt. of an epoxy-free spirolactone-type aldosterone receptor antagonist and a therapeutically-effective amt. of an angiotensin II receptor antagonist. Preferred angiotensin II receptor antagonists are those compds. having high potency and bioavailability and which are characterized in having an imidazole or triazole moiety attached to a biphenylmethyl or pyridinyl/phenylmethyl moiety. A preferred epoxy-free spirolactone-type aldosterone receptor antagonist is spironolactone. A preferred combination therapy includes the angiotensin II receptor antagonist 5-[2-[5-[(3,5-dibutyl-1H-1,2,4-triazol-1-yl)methyl]-2-pyridinyl]phenyl-1H-tetrazole] and the aldosterone receptor antagonist spironolactone.

IT 186616-16-0, UP 275-22

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(angiotensin II antagonist combination with spironolactone or other epoxy-free spirolactone-type aldosterone receptor antagonist for treatment of cardiofibrosis or cardiac hypertrophy)

RN 186616-16-0 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-butyl-6-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 31 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:140243 CAPLUS

DOCUMENT NUMBER:

126:139886

TITLE:

CN

Method to treat cardiofibrosis or cardiac hypertrophy with a combination therapy of an angiotensin II

antagonist and an epoxy-steroidal aldosterone

antagonist

Egan, James J.; Mcmahon, Ellen G.; Olins, Gillian M.; INVENTOR (S):

Schuh, Joseph R.

PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Egan, James J.; Mcmahon, Ellen

G.; Olins, Gillian M.; Schuh, Joseph R.

PCT Int. Appl., 202 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND		DATE			APPLICATION NO.						DATE			
WO	WO 9640255			A2		19961219			WO 1996-US8709						19960605			
WO	WO 9640255			A3		19970123												
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FI,	GB,	GE,	ΗU,	ΙL,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KZ,	LK,	LR,	LS,	
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	ΡL,	PT,	RO,	RU,	SD,	
		SE,	SG															
	RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA			
AU 9660392 A1						19961230 AU 1996-60392 199606								0605				
PRIORITY APPLN. INFO.:								US 1995-486085 19950607										
					1	NO 1996-US8709					19960605							

A therapeutic method is described for treating cardiofibrosis or cardiac AB hypertrophy using a combination therapy comprising a therapeutically effective amt. of an epoxy-steroidal aldosterone receptor antagonist and a therapeutically-effective amt. of an angiotensin II receptor antagonist. Preferred angiotensin II receptor antagonists are those compds. having high potency and bioavailability and which are characterized in having an imidazole or triazole moiety attached to a biphenylmethyl or pyridinyl/phenylmethyl moiety. Preferred epoxy-steroidal aldosterone receptor antagonists are 20-spiroxane steroidal compds. characterized by the presence of a 9.alpha., 11.alpha.-substituted epoxy moiety. A preferred combination therapy includes the angiotensin II receptor antagonist 5-[2-[5-[(3,5-dibutyl-1H-1,2,4-triazol-1-yl)methyl]-2pyridinyl]phenyl]-1H-tetrazole and the aldosterone receptor antagonist epoxymexrenone.

IT 186616-16-0, UP 275-22

> RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(angiotensin II antagonist and epoxy-steroidal aldosterone antagonist combination for treatment of cardiofibrosis or cardiac hypertrophy)

186616-16-0 CAPLUS RN

CN [1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-butyl-6-[[2'-(1H-tetrazol-5yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

ANSWER 32 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:127978 CAPLUS

DOCUMENT NUMBER: 126:171605

TITLE: Preparation of triazolopyrimidines as agrochemical

fungicides

INVENTOR(S): Pees, Klaus Jurgen; Albert, Guido PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 276, 384,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE \_\_\_\_\_ 19970114 US 5593996 US 1995-412401 19950328 Α PRIORITY APPLN. INFO .: EP 1991-122422 Α 19911230 US 1992-998113 B1 19921229 US 1994-276384 B2 19940718

OTHER SOURCE(S): MARPAT 126:171605

ĠΙ

The title compds. [I; R1 = C1-12 alkyl, C2-6 alkenyl, C2-6 alkynyl, etc.; R2 = H, C1-4 alkyl; R1R2 = (un)substituted pyrrolidinyl, piperidinyl, dihydropyridyl; R3 = (un)substituted Ph, naphthyl; R4 = halo, (un)substituted NH2], useful as fungicides, were prepd. Thus, reaction of 5,7-dichloro-6-(4-methylphenyl)-1,2,4-triazolo[1,5-a]pyrimidine with cyclopentylamine in the presence of Et3N in THF afforded 87% II which showed MIC of 12.5 .mu.g/mL and 1.56 .mu.g/mL against Botrytis cinerea and Alternaria solani, resp.

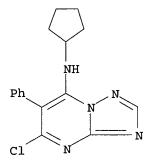
IT 150987-39-6P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of triazolopyrimidines as agrochem. fungicides)

RN 150987-39-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-chloro-N-cyclopentyl-6-phenyl-(9CI) (CA INDEX NAME)



ANSWER 33 OF 110 CAPLUS COPYRIGHT 2003 ACS

1997:90100 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 126:131437

A novel synthesis of 1,2,4-triazolo[1,5-TITLE:

a]isoindolinetrione, 1,2,4-triazolo[1,5-a]pyrimidine, and 1,2,4-triazolo[2,3-a]quinazolinedione derivatives

and their <u>antibacterial</u> activity
Hassan, A. A.; Mohamed, N. K.; Aly, A. A.; Mourad, A. AUTHOR (S):

F. E.

CORPORATE SOURCE: Faculty Science, El-Minia University, El-Minia, 61519,

Egypt

SOURCE: Pharmazie (1997), 52(1), 23-28

CODEN: PHARAT; ISSN: 0031-7144

PUBLISHER: Govi-Verlag Pharmazeutischer Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 126:131437

GI

AB Reaction of amino-, aminomercapto-, and diamino-1,2,4-triazoles with chlorinated benzo- and naphthoquinones gave triazoloisoindolinetriones I [R = H, NH2; R1 = C1, CN or R12 = (CH)4] whereas on reaction with [C(CN)2]2 (TCNE) or dicyanomethylene-1,3-indanedione, triazolopyrimidines II (R = H, NH2, NHPh, 4-MeC6H4NH, 4-MeOC6H4NH; R1 = CN; R2 = NH2 or R = H, NH2, 4-MeC6H4NH, 4-MeOC6H4NH; R1R2 = C6H4-2-CO) were obtained.

III

Triazoloquinazolinediones III (R = NH2, 4-MeC6H4NH) were obtained upon reaction with 2,3-dicyano-1,4-naphthoquinone via the formation of charge-transfer complexes. Five of the compds. prepd. were studied for antibacterial and antifungal activity and showed activity against gram pos. and gram neg. bacteria.

IT186413-49-0P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(antibacterial activity; prepn. of triazoloisoindolinetriones, -pyrimidines, and quinazolinediones)

186413-49-0 CAPLUS RN

[1,2,4]Triazolo[1,5-a]pyrimidine-6,7-dicarbonitrile, 2,5-diamino- (9CI) (CA INDEX NAME)

ANSWER 34 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1996:681534 CAPLUS

DOCUMENT NUMBER:

125:320559

TITLE:

CN

Safened selective herbicidal compositions Glock, Jutta; Hudetz, Manfred; Kerber, Elmar

Ciba-Geigy A.-G., Switz.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 41 pp. CODEN: PIXXD2

INVENTOR(S):

DOCUMENT TYPE:

Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIND DATE				APPLICATION NO.					DATE					
-									-								
W	0 9629	870		Α	1	1996	1003		W	0 19	96-E	P1086	6	1996	0314		
	W:	AL,	ΑU,	BB,	BG,	BR,	CA,	CN,	CZ,	EE,	GE,	HU,	IS,	JP,	KP,	KR,	LK,
		LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR,	TT,
		UA,	US,	UΖ,	VN,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM			
	RW:	KΕ,	LS,	MW,	SD,	SZ,	UG,	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,
		MR,	ΝE,	SN,	TD,	TG											
A	U 9651	084		A	1 :	1996:	1016		ΑI	U 19	96-5	1084		1996	0314		
PRIORI'	TY APP	LN.	INFO	.:				(	CH 1:	995-	901		,	1995	0330		
								Ī	WO 1	996-1	EP108	86		19960	0314		
OTHER :	SOURCE	(S):			MAR	PAT '	125:3	3205	59								

OTHER SOURCE(S):

GΙ

AB The title compn. comprises a pyrimidine or triazine herbicide I [Z = N or CH; R1 = H, CN, OH, etc.; R2,R3 = H or alkyl; R4 = 1-imidazolyl, NHSO2R7, etc.; R5 = alkyl; R6 = alkyl or alkoxy; R7 = (cyclo)alkyl, (un)substituted Ph, etc.; X = O or S] and as antidote a quinoline deriv. II (R8 = H, alkyl, etc.; X1 = H or Cl), a phenylpyrazole deriv., a urea deriv., etc. IT 183172-24-9

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (safened selective herbicidal compn.)

RN 183172-24-9 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-5,6,7-tricarboxylic acid, 2-[[[2-(methoxycarbonyl)-3-thienyl]amino]sulfonyl]-, 5,7-dimethyl ester, mixt. with 2-[(4,6-dimethoxy-2-pyrimidinyl)thio]-3-methoxy-3-methyl-N-(methylsulfonyl)butanamide (9CI) (CA INDEX NAME)

CM 1

CN

CRN 183172-23-8 CMF C16 H13 N5 O10 S2

CM 2

CRN 147111-61-3 CMF C13 H21 N3 O6 S2

ANSWER 35 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1996:394708 CAPLUS

DOCUMENT NUMBER:

125:195557

TITLE:

Reaction of 1,1-diacetylcyclopropane with 3-amino-1,2,4-triazole as a new method for the

synthesis of 6-functionally substituted

1,2,4-triazolo[1,5-a]pyrimidines

AUTHOR (S):

Vartanyan, M. M.; Soloveva, T. Yu.; Eliseev, O. L.;

Panina, M. E.

CORPORATE SOURCE:

N.D. Zelinsky Inst. Organic Chem., Russian Acad.

Scis., Moscow, 117913, Russia

SOURCE:

Izvestiya Akademii Nauk, Seriya Khimicheskaya (1993),

(7), 1322-1323

CODEN: IASKEA

Institut Organicheskoi Khimii im. N. D. Zelinskogo

Rossiiskoi Akademii Nauk

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

Russian

Ι

AB 1,1-Diacetylcyclopropane reacts with 3-amino-1,2,4-triazole in both aq. and glacial acetic acid to give, resp., triazolo[1,5-a]pyrimidines I (R =H, Ac) in 52 and 46% yield, resp.

IT 180621-77-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN180621-77-6 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-ethanol, 5,7-dimethyl- (9CI) (CA INDEX NAME)

L3 ANSWER 36 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:94597 CAPLUS

DOCUMENT NUMBER: 124:232289

OCCUMENT NUMBER: 124:23228

TITLE: Synthesis of polycyclic nitrogen-containing

heterocycles: one-pot formation of 1,6-naphthyridine

II

ring system by reaction of

aminocyanomethylthioheterocycles with dialkyl

acetylenedicarboxylates

AUTHOR(S): Tominaga, Yoshinori; Yoshioka, Noriko

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Nagasaki

University, Nagasaki, 852, Japan SOURCE: Heterocycles (1996), 42(1), 53-6

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

SMe

OTHER SOURCE(S): CASREACT 124:232289

Ι

GI

O NH2
MeN CN

N Me

The reaction of 5-amino-6-cyano-1,3-dimethyl-7-methylthiopyrido[2,3-d]pyrimidine-2,4(1H,3H)-dione (I) with di-Me acetylenedicarboxylate (DMAD) in the presence of potassium carbonate in DMSO gave tetra-Me 8,9,10,11-tetrahydro-8,10-dimethyl-9,10-dioxo-4H-pyrimido[4',5':5,6]pyrido[2,3,4-cb][1,6]naphthyridine-2,3,5,6-tetracarboxylate (II). The reaction of other heterocycles bearing amino, cyano, and methylthio groups with DMAD or DEAD under the same reaction conditions gave the corresponding tetracyclic heterocycles contg. the fundamental 1,6-naphthyridine ring system.

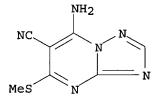
IT 98190-26-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of naphthyridine ring system from aminocyanomethylthioheterocyc les and acetylenedicarboxylates)

RN 98190-26-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-5-(methylthio)-(9CI) (CA INDEX NAME)



L3 ANSWER 37 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:548834 CAPLUS

DOCUMENT NUMBER: 123:112014

TITLE: On Triazoles. XXXV 1. The reaction of

5-amino-1,2,4-triazoles with di- and triketones AUTHOR(S): Reiter, Jozsef; Pongo, Laszlo; Koevesdi, Istvan;

Pallagi, Istvan

CORPORATE SOURCE: EGIS Pharmaceuticals, Budapest, Hung.

SOURCE: Journal of Heterocyclic Chemistry (1995), 32(2),

407-17

CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal LANGUAGE: English

AB The reaction of 5-amino-1H-1,2,4-triazoles with aliph., arom. and cyclic 1,3-diketones, 1,4-diketones, and different linear and non linear triketones was studied. It was shown that in case of unsym. aliph. 1,3-diketones the regiochem. outcome of the reaction was influenced by steric factors. In case of triacetylmethane and 3-(4-chlorobenzyl)-2,4-pentanedione the splitting of one acetyl group from the reactant was obsd. during the reaction. A liner triketone, namely the 2,4,6-heptanetrione reacted as a simple 1,3-diketone.

IT 165684-51-5P

RN 165684-51-5 CAPLUS

CN Ethanone, 1-[7-methyl-2-(methylthio)[1,2,4]triazolo[1,5-a]pyrimidin-6-yl]-(9CI) (CA INDEX NAME)

L3 ANSWER 38 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:497953 CAPLUS

DOCUMENT NUMBER: 122:314513

TITLE: Synthesis of 3-formyl-2,5-dialkoxytetrahydrofurans and

their reaction with 3-amino-1,2,4-triazole

AUTHOR(S): Vartanyan, M. M.; Eliseev, O. L.; Solov'eva, T. Yu.;

Ugrak, B. I.; Skov, H. R.

CORPORATE SOURCE: N. D. Zelinsky Inst. Org. Chem., Moscow, 117913,

Russia

SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (1994),

(11), 1997-2001 CODEN: IASKEA 09/ 895,975

PUBLISHER:

Institut Organicheskoi Khimii im. N. D. Zelinskogo

Rossiiskoi Akademii Nauk

DOCUMENT TYPE:

LANGUAGE:

Journal Russian

GI

$$R$$
 $R^{1}$ 
 $R^{2}$ 
 $CHO$ 
 $CH$ 

Tetrahydrofurancarboxaldehydes I (R = Me, CH2OH, MeOCH2, etc., R1 = H; R = AB R1 = Me) and II (R2 = H, Me, Ph) are prepd. by hydroformylation reactions. Reaction of I with 3-amino-1,2,4-triazole gave triazolopyrimidines III.

IT163401-49-8P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN

163401-49-8 CAPLUS 2-Propanone, 1-(7-methyl[1,2,4]triazolo[1,5-a]pyrimidin-6-yl)- (9CI) (CA CNINDEX NAME)

$$\begin{array}{c|c} O & Me \\ \parallel & Me \\ C-CH_2 & N \\ \hline & N \\ \end{array}$$

ANSWER 39 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1995:462796 CAPLUS

DOCUMENT NUMBER:

122:278022

TITLE:

Image formation of silver halide photographic

materials

INVENTOR(S): PATENT ASSIGNEE(S):

Ito, Katsuhiko; Sanpei, Takeshi Konishiroku Photo Ind, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 27 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	<b>-</b>			
JP 06347954	A2	19941222	JP 1993-140638	19930611
PRIORITY APPLN. INFO.	:		JP 1993-140638	19930611
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title photog. materials, possessing .gtoreq.1 Ag halide emulsion layer AR on a support and contg. a hydrazine deriv. ANA1NA2GR [A = aryl, heterocycle contg. .gtoreq.1 S or O; G = (CO)n, sulfonyl, sulfoxy, P(:O)R1, iminomethylene; n = 1, 2; A1 = A2 = H or when 1 of A1 or A2 is H the other is (substituted) alkylsulfonyl (substituted) acyl; R = H, alkyl, aryl, heterocycle, amino, OR2; R1 = alkyl, alkenyl, alkynyl, aryl, satd. heterocycle, OR3; R2, R3 = alkyl, alkenyl, alkynyl, aryl, satd. heterocycle], an amine compd. R71R72NR73 (R71-73 = H, substituent, R71-73 may form a ring), and an alc. compd. R91R92CHOH (R91, R92 = H, substituent) in the emulsion layer and/or other hydrophilic colloid layer, are processed with a developing soln. of pH 9.5-12.3 contg. dihydroxybnezene-type developing agents, 3-pyrazolidone-type or aminophenol-type developing agents, .gtoreq.0.3 mol/L sulfites, and a N-contg. heterocyclic compd. selected from I, II, and III [R31-34, R41-44, R51-54 = H, SM1, OH, (substituted) alkyl, alkoxy, amino, aryl, SO3M2, CO2M3, .gtoreq.1 of R31-34, .gtoreq.1 of R41-44, and .gtoreq.1 of R51-54 are SM1; M1-3 = H, alkali metal, ammonium]. Even if the materials are processed with developing solns. contq. high concns. of sulfites, Ag sludge formation is suppressed and super-high contrast images with high sensitivity are obtained. Thus, a photog. film with a Aq(Cl, I, Br) emulsion layer contq. IV and Et2N(CH2)2(OCHMeCH2)7S(CH2)2NEt2 was exposed using a HeNe laser and developed with a developing soln. (pH 11.5) contg. hydroquinone, 4-methyl-4-hydroxymethyl-1-phenyl-3-pyrazolidone, Na2SO3 (55 g/L), and I (R31 = SH, R32-34 = H).

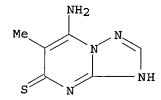
IT 159257-36-0

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(hydroquinone-type photog. developer contg. nitrogen-contg. heterocyclic compd.)

RN 159257-36-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-5(1H)-thione, 7-amino-6-methyl- (9CI) (CA INDEX NAME)



L3 ANSWER 40 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:420643 CAPLUS

DOCUMENT NUMBER: 123:228204

TITLE: Triazolopyrimidine derivatives which are angiotensin

II receptor antagonists, their methods of preparation and pharmaceutical compositions in which they are

present

INVENTOR(S): Bru-Magniez, Nicole; Guengor, Timur; Teulon,

Jean-Marie

PATENT ASSIGNEE(S): Laboratoires Upsa, Fr.

SOURCE: U.S., 34 pp. Cont.-in-part of U.S. 5,231,094.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT 1									APP	LI	CATI	ON N	0.	DATE				
US	5387					1995				us Us	19:	 93-3	9382		1993	0416			
	26876																		
FR	26876	576		В	1	1994	0708												
US	52310	94		A		1993	0727			US	19	92-8	6395	5	1992	0406			
FR	26876	577		A:	1.	1993	0827			FR	19	92-5	417		1992	0430			
FR	26876	577		B	1	1996	1011												
WO	93170	024		A:	1	1993	0902		1	WO	19	93-F	R161		1993	0218			
	W:	ΑU,	CA,	CZ,	FI,	HU,	JΡ,	KR,	NZ	, R	U,	SK,	UA,	US					
						DK,											PT,	SE	
	93363									UA	19	93 - 3	6358		1993	0218			
	66854																		
	62804									ΕP	19	93 - 9	0540	2	1993	0218			
EP	62804	16		B:	1	1999	0512												
	R:	-	-	-		-	-	-						-	-	-	NL,	PT,	SE
	07504																		
	28034																		
	94038									FI	199	94-3	808		1994	0819			
PRIORIT	Y APPI	LN.	INFO.	. :					FR	199	2 - 2	2109		Α	1992	0224			
									US :	199	2 - 8	3639	55	A2	1992	0406			
									FR	199	2 - 5	5417		Α	1992	0430			
														W	1993	0218			
OTHER CO	ATTD CE	(c).			MAT	ידיעכונ	122.1	2202	$\alpha$										

OTHER SOURCE(S):

MARPAT 123:228204

AΒ The present invention relates to the derivs. of the formula I [in which: one of the radicals R1 and R2 is a lower alkyl radical having 1 to 6 carbon atoms; an ether radical of the formula (CH2)pOR, in which p is an integer from 1 to 6 and R is a lower alkyl radical having 1 to 6 carbon atoms or a benzyl radical; or an alc. radical of the formula (CH2)pOH, in which p is as defined above; and the other radical R1 or R2 is the hydrogen atom; a halogen atom; a lower alkyl radical having 1 to 6 carbon atoms; or a radical selected from the group comprising the radicals N3, OR4, SR4, NR5R6 and NH(CH2) nNR5R6, in which: R4 = e.g., hydrogen atom; a lower alkyl radical having 1 to 6 carbon atoms or a C3-C7-cycloalkyl radical; R5 and R6, which are identical or different, are, e.g., the hydrogen atom; or a lower alkyl radical having 1 to 6 carbon atoms or a C3-C7-cycloalkyl radical; n = 1-4; X and Y, which are different, are in

one case the nitrogen atom; and in the other case a group C-R7 in which R7 = e.g., H, C1-6-alkyl; R3 = II or III in which: Z is CH or N or Z' is S or O; R11 is the hydrogen atom or a halogen atom; and R12 is a tetrazole radical, CN, COOH or CONH2] and its tautomeric forms and its pharmaceutically acceptable addn. salts. I are useful in therapeutics, esp. for the treatment and prevention of cardiovascular diseases and in particular for the treatment of hypertension, cardiac insufficiency and diseases of the arterial wall, esp. atherosclerosis. Percentage displacement of the radioligand specifically bound to the adrenal angiotensin II receptors by I: at 1 .times. 10-5 M, 58-69%; at 1 .times. 10-7 M, 11-60%. Inhibition of cell proliferation induced by growth factors: 100% inhibition of the incorporation of 3H-thymidine induced by PDGF at 1 .times. 10-4 M.

IT 168152-71-4P, 5-Azido-7-propyl-6-[(2'-(1H-tetrazol-5-yl)-biphenyl4-yl)methyl]-1,2,4-triazolo[1,5-a]pyrimidine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(triazolopyrimidine derivs. which are angiotensin II receptor antagonists)

RN 168152-71-4 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine, 5-azido-7-propyl-6-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 41 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1995:388997 CAPLUS

DOCUMENT NUMBER:

122:265272

TITLE:

CN

Studies in antiparasitic agents. Part 24. Synthesis of 5-(2-furyl)-2-substituted-amino-1,3,4-triazoles and substituted 1,3,4-triazolo[1,5-a]pyrimidines as potential antifilarial and leishmanicidal agents

AUTHOR(S):

Srivastava, Ravi P.; Kumar, Versha V.; Bhatia, Sonika;

Sharma, Satyavan

CORPORATE SOURCE:

Medicinal Chemistry Division, Central Drug Research

Institute, Lucknow, 226 001, India

SOURCE:

Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1995),

34B(3), 209-14

CODEN: IJSBDB; ISSN: 0376-4699

PUBLISHER:

Publications & Information Directorate, CSIR

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:265272

AB A series of 5-(2-furyl)-2-substituted-amino-1,3,4-triazoles and 2-(2-furyl)-1,3,4-triazolo[1,5-a]pyrimidines have been synthesized as possible inhibitors of antioxidant enzymes in filariids and leishmanial parasites. All the compds. have been evaluated for their antifilarial and antileishmanial activities. The antifilarial activity has been evaluated

IT

against Litomosoides carinii infection in cotton rats while the in vitro leishmanicidal activity was detd. using macrophage amastigote culture isolated from cotton rats infected with Leishmania donovani. In both the tests, none of the compds. exhibits any noteworthy antiparasitic activity. 162711-67-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis of furyl-substituted aminotriazoles and triazolopyrimidines as potential antifilarial and leishmanicidal agents)

RN 162711-67-3 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-2-(2-furanyl)-CN (9CI) (CA INDEX NAME)

ANSWER 42 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1994:711784 CAPLUS

DOCUMENT NUMBER:

121:311784

TITLE:

Composition for developing a black-and-white silver

halide photographic light-sensitive material.

INVENTOR(S):

Ishikawa, Wataru; Sanpei, Takeshi; Kato, Mariko

PATENT ASSIGNEE(S):

Konica Corp., Japan Eur. Pat. Appl., 41 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
EP 601503	A2	19940615	EP 1993-119560 19931204
EP 601503	A3	19940706	
EP 601503	B1	20000607	
R: DE, FR,	GB, IT		
JP 06175302	A2	19940624	JP 1992-329601 19921209
JP 3172895	B2	20010604	
JP 06186691	A2	19940708	JP 1992-342765 19921222
JP 3172897	B2	20010604	
JP 06258783	A2	19940916	JP 1993-45345 19930305
JP 3184896	B2	20010709	
US 5508153	Α	19960416	US 1995-380147 19950127
PRIORITY APPLN. INFO.	:		JP 1992-329601 A 19921209
			JP 1992-342765 A 19921222
			JP 1993-45345 A 19930305
			US 1993-159847 B1 19931201

OTHER SOURCE(S): MARPAT 121:311784

GΙ For diagram(s), see printed CA Issue.

The developer compn. contains a compd. represented by I, II, III, IV, or V AB [R , R2, R3 and R4 each independently a H, halogen atom, -SM1 group, an alkyl group having 1-5 carbon atoms, an alkoxyl group having 1-5 carbon atoms, a hydroxyl group, an SO3M3 group, an alkenyl group having 2 to 5 carbon atoms, an amino group, a COOM2 group, a carbamoyl group or a Ph group, provided that at least one of R1-R4 in each formula is an -SM

## 09/ 895,975

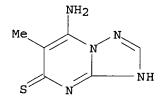
group, in the above M1-M3 are each independently a hydrogen atom, an alkali metal atom or an ammonium group; Z = atoms necessary to form a ring necessary to form a pyrazole or a triazole ring (in the case of triazole ring the R1 is H); Z1 = atoms necessary to form a triazole ring where the R1 is located on the non-ring-sharing C]. The pH value of the compn. is <11.5. The developer does not produce silver stains, does not spoil fixability, and can be used in rapid processing.

IT 159257-36-0

RL: MOA (Modifier or additive use); USES (Uses) (compn. for photog. developer)

RN 159257-36-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-5(1H)-thione, 7-amino-6-methyl- (9CI) (CA INDEX NAME)



L3 ANSWER 43 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:680667 CAPLUS

DOCUMENT NUMBER: 121:280667

TITLE: Triazolopyrimidine derivatives with fungicidal

activity

INVENTOR(S):
Pees, Klaus-Juergen

PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B.V., Neth.

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENT NO.	KIND	DATE		APPLICATION NO	٠.	DATE			
E	P 613900	A1	19940907		EP 1994-200532	-	19940302			
E	P 613900	B1	19970514							
	R: AT,	BE, CH, DE	E, DK, ES,	FR, G	B, GR, IE, IT,	LI	, LU, MC,	NL,	PT,	SE
I					IL 1994-108731				,	
					AU 1994-56332					
		B2								
А	T 153025	E	19970515		AT 1994-200532		19940302			
E	S 2101429	Т3	19970701		ES 1994-200532					
		AA			CA 1994-211694					
В		A			BR 1994-808					
z	A 9401484	Α	19941110		ZA 1994-1484		19940303			
J	P 07002861				JP 1994-56799					
	U 68050				HU 1994-647					
R	0 112869	B1			RO 1994-327					
R	U 2126408	C1			RU 1994-7093					
C	N 1094407	А			CN 1994-102637					
U	S 5756509				US 1997-838013					
PRIORI	TY APPLN.				1993-103465					
					1994-205000					
					1995-458009					

OTHER SOURCE(S): MARPAT 121:280667

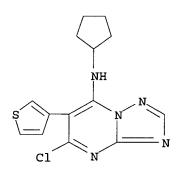
GI

The invention relates to triazolopyrimidine derivs. I [R1 = AΒ (un) substituted alkyl, alkenyl, alkynyl, alkadienyl, cycloalkyl, bicycloalkyl or heterocyclyl; R2 = H, alkyl; or NR1R2 = (un) substituted cycloalkyl or heterocyclyl; R3 = (un)substituted cycloalkyl or heterocyclyl; R4 = H, halo, NR5R6; R5 = H, amino, alkyl, cycloalkyl, bicycloalkyl; R6 = H, alkyl] and their prepn., compns., and use as fungicides. For example, condensation of 5,7-dichloro-6-(3-thienyl)-1,2,4triazolo[1,5-a]pyrimidine with cyclopentylamine in THF in the presence of Et3N gave 71% I [R1 = cyclopentyl, R2 = H, R3 = 3-thienyl, R4 = Cl] (II). In a variety of expts., II gave > 80% control of (greenhouse, 600 ppm) Plasmopara viticola, Phytophthora infestans, Alternaria solani, and Botrytis cinerea, as well as (in vitro, 30 ppm) Pseudocercosporella herpotrichoides, Rhizoctonia solani, and Venturia inaequalis. I (R1 = iso-Pr, bicyclo[2.2.1]hept-2-yl; others as for II) were similarly prepd. and tested.

RN 158841-02-2 CAPLUS

CN

[1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-chloro-N-cyclopentyl-6-(3-thienyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 44 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:99434 CAPLUS

DOCUMENT NUMBER: 120:99434

TITLE: <u>Herbicides</u> containing triazolopyrimidine derivatives INVENTOR(S): Sato, Junichi; Sanemitsu, Minoru; Ikushima, Nobusuke;

Shibata, Hideyuki

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

09/ 895,975

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE \_\_\_\_ \_\_\_\_\_ JP 05262773 A2 19931012 JP 1993-7462 19930120 PRIORITY APPLN. INFO.: JP 1992-9173 19920122

MARPAT 120:99434 OTHER SOURCE(S):

GT

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AB A new herbicide contains a triazolopyrimidine deriv. selected from I ( R1 = H, lower alkoxy, alkylthio, alkyl, haloalkyl, haloalkoxy, cyano, halo, haloalkylthio; R2 = lower alkoxy, alkyl, alkylthio; R3 = halo, lower haloalkyl, haloalkylthio, etc.).

IT 152041-39-9P

> RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

RN 152041-39-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 7-(3-chlorophenyl)-6-ethyl-2-(trifluoromethyl) - (9CI) (CA INDEX NAME)

ANSWER 45 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:8611 CAPLUS

DOCUMENT NUMBER: 120:8611

TITLE: (Pyrimidylmethyl) biphenyls which are angiotensin II

receptor antagonists

INVENTOR (S): Bru-Magniez, Nicole; Gungor, Timur; Teulon, Jean Marie

DATE

PATENT ASSIGNEE(S): Laboratoires UPSA, Fr.

SOURCE: U.S., 14 pp.

CODEN: USXXAM DOCUMENT TYPE: Patent

English FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

LANGUAGE:

PATENT NO. KIND DATE APPLICATION NO.

	<b></b>								
US	5231094		A	19930727		US	1992-86395	5	19920406
FR	2687676		A1	19930827		FR	1992-2109		19920224
FR	2687676		B1	19940708					
FR	2687677		A1	19930827		FR	1992-5417		19920430
FR	2687677		B1	19961011					
HU	70953		A2	19951128		HU	1994-2429		19930218
HU	70949		A2	19951128		HU	1994-2430		19930218
HU	220392		В	20020128					
CZ	282075		B6	19970514		CZ	1994-2044		19930218
RU	2116308		C1	19980727		RU	1994-40854		19930218
AT	179979		E	19990515		AT	1993-90540	2	19930218
ES	2133390		Т3	19990916		ES	1993-90540	2	19930218
US	5389632		Α	19950214		US	1993-21897		19930224
US	5387747		Α	19950207		US	1993-39382		19930416
PRIORITY	Y APPLN.	<pre>INFO.:</pre>			FR	199	2-2109	Α	19920224
					FR	199	2-5417	Α	19920430
					US	199	2-863955	A2	19920406
•					WO	199	3-FR160	Α	19930218
					WO	199	3-FR161	W	19930218

OTHER SOURCE(S):

MARPAT 120:8611

GΙ

$$\mathbb{R}^{1}$$
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{3}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{2}$ 
 $\mathbb{R}^{2}$ 

The title compds. I (one of R1 and R2 is a C1-6 alkyl radical and the other is H, halogen, OH, SH, alkoxy, etc.; R3 = tetrazolyl; 2 of the X, Y and Z atoms are N and the other is CR7; R7 = H, C1-6 alkyl), which are angiotensin II receptor antagonists and useful in the treatment of hypertension, etc., are prepd. Thus, trimethyltin azide was reacted with 6-[(2'-cyanobiphenyl-4-yl)methyl]-7-[2-(morpholin-4-yl)ethylamino]-5-propylpyrazolo[1,5-a]pyrimidine, producing I (R1 = Pr, R2 = Q, R3 = 1H-tetrazol-5-yl, X = N, Y = Z = CH), which demonstrated displacement of labeled ligand from angiotensin II receptors isolated from rat adrenal glands.

## IT 151326-85-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of angiotensin II receptor antagonists)

RN 151326-85-1 CAPLUS

CN [1,1'-Biphenyl]-2-carbonitrile, 4'-[(1,5-dihydro-5-oxo-7-propyl[1,2,4]triazolo[1,5-a]pyrimidin-6-yl)methyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 46 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:671190 CAPLUS

DOCUMENT NUMBER: 119:271190

TITLE: Triazolopyrimidine derivatives with fungicidal

activity

INVENTOR(S):
Pees, Klaus Juergen; Albert, Guido

PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V.,

Neth.

אדאם האדב

SOURCE: Eur. Pat. Appl., 38 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: Engl FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO

OTHER SOURCE(S):

PA	TENT NO.	KIND	DATE		APPLICATION NO.	DATE	
EP EP	550113 550113	A2 A3	19930707 19930804		EP 1992-204097	19921228	
EP	550113	B1	19971015				
	R: AT,	BE, CH, DE	, DK, ES,	FR, (	GB, GR, IE, IT, L	I, LU, NL,	PT, SE
7.11	0000405	7.4	10000000		377 4444 444		
AU	667204	В2	19960314				
BR	9205172	Α	19930706		BR 1992-5172	19921228	
ZA	9210043	A	19930728		ZA 1992-10043	19921228	
CN	1075144	A	19930811		AU 1992-30435  BR 1992-5172  ZA 1992-10043  CN 1992-115232  HU 1992-4135  JP 1992-358632	19921228	
CN	1033643	В	19961225				
HU	63305	A2	19930830		HU 1992-4135	19921228	
HU	217349	В	20000128				
JP	05271234	A2	19931019		JP 1992-358632	19921228	
EP	782997	A2	19970709		EP 1997-105710	19921228	
EP	782997	A3	19980722				
EP	782997	B1	20000426				
	R: AT,	BE, CH, DE	, DK, ES,	FR, C	BB, GR, IE, IT, LI	LU, NL,	PT, SE
IL	104244	A1	19970713		IL 1992-104244	19921228	
RU	2089552	C1	19970910		RU 1992-16218	19921228	
AT	159256	E	19971115		AT 1992-204097	19921228	
ES	2108727	Т3	19980101		RU 1992-16218 AT 1992-204097 ES 1992-204097	19921228	
բև	174047	B1	19980630		PL 1992-297160	19921228	
AT	192154	E T3	20000515		AT 1997-105710	19921228	
ES	2147411	Т3	20000901		ES 1997-105710	19921228	
CA	2086404	AA	19930701		CA 1992-2086404	19921229	
CN	1141119	Α	19970129		CA 1992-2086404 CN 1996-103723	19960322	
CN	1074650	В	20011114				
PRIORITY	APPLN. I	NFO.:		EF	9 1991-122422 A 9 1992-204097 A3	19911230	
					1992-204097 A3	19921228	
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MARPAT 119:271190

ADDITONTION NO

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GI

Amination of triazolopyrimidine derivs. I [R, R4 = halo; R3 = (un)substituted aryl] with amines HNR1R2 [R1 = (un)substituted alkyl, alkenyl, alkynyl, alkadienyl, cycloalkyl, bicycloalkyl, heterocyclyl; R2 = H, alkyl; or NR1R2 = (un)substituted heterocyclyl] and optional subsequent reaction(s) give claimed title compds. I [R = NR1R2, R1-R3 = same, R4 = H, halo, (un)substituted amino], useful as fungicides. Apple cuttings of the variety Morgenduft, (6 wk old) were treated with a soln. of test compd. I (R = cyclopentylamino, R3 = Ph, R4 = Br) at 400 ppm in water/acetone/Triton X or water/methanol/Triton X. After 24 h., the plants were infected with Venturia inaequalis (about 50,000 conidia/mL), and after incubation for 14 days showed no infection.

IT 150987-16-9P

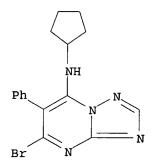
CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and fungicidal activity of)

RN 150987-16-9 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-bromo-N-cyclopentyl-6-phenyl-(9CI) (CA INDEX NAME)



L3 ANSWER 47 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:207427 CAPLUS

DOCUMENT NUMBER: 118:207427

TITLE: 1,2,4-Triazolo[1,5-a]pyrimidine-2-sulfonanilide

herbicides. Influence of alkoxy heterocyclic substitution on in vitro and in vivo biological

activity and soil decomposition

AUTHOR(S): Kleschick, William A.; Carson, C. M.; Costales, Mark

J.; Doney, J. J.; Gerwick, B. Clifford; Holtwick, J.
B.; Meikle, R. W.; Monte, W. T.; Little, J. C.; et al.

CORPORATE SOURCE: DowElanco Res. Lab., Greenfield, IN, 46140, USA

SOURCE: ACS Symposium Series (1992), 504 (Synth. Chem.

Agrochem. III), 17-25

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal LANGUAGE: English

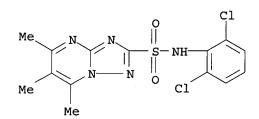
AB The synthesis and structure activity studies surrounding alkoxy substituted 1,2,4-triazolo[1,5-a]pyrimidine-2-sulfonanilide herbicides is discussed. Groups substituted at the 5- and 7-positions of the triazolopyrimidine ring can include amino, alkylamino, dialkylamino and alkylthio. The effects of substitutions such as alkyl, alkyloxy, halo, haloalkyl, and nitro on the Ph and triazolopyrimidine rings on the herbicidal activity against broadleaf weeds and decompn. of these compds. in the soil is reported. Thus, alkoxy substitution on the triazolopyrimidine ring enhanced herbicidal activity and provides a means to modulate the soil behavior of these compds.

IT 98966-99-5P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and soil stability of, herbicidal activity in relation to)

98966-99-5 CAPLUS RN

CN[1,2,4]Triazolo[1,5-a]pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl)-5,6,7-trimethyl- (9CI) (CA INDEX NAME)



ANSWER 48 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:2390 CAPLUS

DOCUMENT NUMBER: 118:2390

TITLE: 7-Phenyl-1,2,4-triazolo[1,5-a]pyrimidines and related

heterocycles. A new family of bleaching herbicides

AUTHOR (S): Selby, Thomas P.; Andrea, Tariq A.; Denes, L. Radu;

Finkelstein, Bruce L.; Fuesler, Thomas P.; Smith, Ben

CORPORATE SOURCE: Stine-Haskell Res. Cent., E. I. du Pont de Nemours and

co., Newark, DE, 19714, USA

SOURCE: ACS Symposium Series (1992), 504 (Synth. Chem.

Agrochem. III), 91-102

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE:

Journal

LANGUAGE: English GΙ

Substituted 7-phenyl-1,2,4-triazolo[1,5-a]pyrimidines (I, R1 = H, Me, Et, AB halo, CF3, OMe; R2 = alkyl, OMe, SMe; R3 = H, Me, C1; R4 = H, C1, CF3, Me) and related heterocycles represent a new family of highly active herbicides which produce bleaching symptoms and have demonstrated activity at rates as low as 31 g/ha. Many of the 25 compds. studied were readily prepd. via condensation of 3-amino-1,2,4-triazoles with phenyl-substituted 1,3-dicarbonyl synthons, most commonly phenyl-1,3-diketones. In addn., other analogs were made by derivatization of the substituents on these intact triazolo[1,5-a]pyrimidines. Syntheses of related 2-alkoxy and haloalkoxytriazolo[1,5-a]pyrimidines, a triazolo[1,5-b]pyridazine, and a pyrazolo[1,5-a]pyrimidine are also described. This class of compds. has shown broad-spectrum weed control with selectivity to key crops such as cereals, cotton, and rice. The mode-of-action was inhibition of phytoene desaturase, an enzyme involved in carotenoid biosynthesis.

IT 144730-27-8P

CN

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and herbicidal activity of, structure in relation to)

144730-27-8 CAPLUS RN

> [1,2,4]Triazolo[1,5-a]pyrimidine, 5,6-dimethyl-7-phenyl-2-(trifluoromethyl) - (9CI) (CA INDEX NAME)

ANSWER 49 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:628373 CAPLUS

DOCUMENT NUMBER: 117:228373

TITLE: 1,2,4-Triazolo[1,5-a]pyrimidine-2-sulfonanilide

> herbicides. Influence of alkyl, haloalkyl, and halogen heterocyclic substitution on in vitro and in

vivo biological activity

AUTHOR (S):

Kleschick, William A.; Costales, Mark J.; Gerwick, B. Clifford; Holtwick, J. B.; Meikle, R. W.; Monte, W. T.; Pearson, N. R.; Snider, S. W.; Subramanian, M. V.;

et al.

CORPORATE SOURCE: DowElanco Res. Lab., Greenfield, IN, 46140, USA

SOURCE: ACS Symposium Series (1992), 504 (Synth. Chem.

Agrochem. III), 10-16

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal LANGUAGE: English

An outline of the synthetic routes used to prep. a series of alkyl, halo AR and haloalkyl substituted 1,2,4-triazolo[1,5a]-pyrimidine-2-sulfonanilides is presented. The in vitro activity against acetolactate synthase and the herbicidal activity of these analogs is discussed. The evaluation of these activities led to the selection of DE-498 as a candidate for development as a broadleaf herbicide for soybeans, corn and other crops.

IT 98966-99-5P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and herbicidal activities of, structures in relation to)

RN 98966-99-5 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl)-CN 5,6,7-trimethyl- (9CI) (CA INDEX NAME)

ANSWER 50 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:559087 CAPLUS

DOCUMENT NUMBER: 115:159087

Synthesis of thieno[3,2-e]-1,2,4-TITLE:

triazolo[a]pyrimidines

Tumkevicius, S.; Mickiene, J. AUTHOR (S):

Dep. Org. Chem., Vilnius Univ., Vilnius, 232006, USSR CORPORATE SOURCE:

SOURCE: Organic Preparations and Procedures International

(1991), 23(4), 413-18 CODEN: OPPIAK; ISSN: 0030-4948

CO<sub>2</sub>Et

II

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

- Title compds. I (R = H, Ac) and II were prepd. in several steps. AB cyanothiazolopyrimidinone III was chlorinated with POCl3/N,Ndiethylaniline and subsequently cyclocondensed with HSCH2CO2Et to give II (R = H) which was acetylated with Ac20 to give II (R = Ac).
- IT 134894-92-1P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 134894-92-1 CAPLUS RN

III

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-[4-(diethylamino)phenyl] - (9CI) (CA INDEX NAME)

L3 ANSWER 51 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:492201 CAPLUS

DOCUMENT NUMBER: 115:92201

TITLE: Reaction of 6-cyano-1,2,4-triazolo[1,5-a]pyrimidin-

5(8H) - one with phosporous oxychloride in the presence

of N, N-diethylaniline

AUTHOR(S): Tumkevicius, S.; Mickine, J.

CORPORATE SOURCE: Vilnius State Univ., Vilnius, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1991), (2),

281

CODEN: KGSSAQ; ISSN: 0453-8234

DOCUMENT TYPE: Journal

LANGUAGE: Russian

LANGUAGE:

HN CN N CN R

AB The title reaction of triazolopyrimidinone I, in addn. to the expected chloro deriv. II (R = Cl) also gives the (diethylamino)phenyl deriv. II (R = p-Et2NC6H4) as a major byproduct.

IT 134894-92-1P

RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, as byproduct in chlorination of cyanotriazolopyrimidinone)

RN 134894-92-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-[4-

(diethylamino)phenyl] - (9CI) (CA INDEX NAME)

L3 ANSWER 52 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:101919 CAPLUS

DOCUMENT NUMBER: 114:101919

TITLE: 1,2,4-Triazolo[1,5-a]pyrimidines. Part 8. Reactions of

amino- and hydrazino-1,2,4-triazolo[1,5-a]-pyrimidine derivatives with dimethylformamide dimethyl acetal

derivatives with dimethyllormamide dimethyl acet

AUTHOR(S): Hempel, Ute; Lippmann, Eberhard; Tenor, Ernst

CORPORATE SOURCE: Sekt. Chem., Karl-Marx-Univ., Leipzig, DDR-7010, Ger.

Dem. Rep.

SOURCE: Zeitschrift fuer Chemie (1990), 30(9), 320-1

CODEN: ZECEAL; ISSN: 0044-2402

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 114:101919

GΙ

The prepn. of amidine derivs. of Rocornal was described. The amidination of 7-amino-1,2,4-triazolo[1,5-a]pyrimidine derivs. with Me2NCH(OMe)2 gave N,N-dimethyl-N'-(5-methyl-1,2,4-triazolo[1,5-a]pyrimid-7-yl)formamidines I (R1 = H, NHCOMe; R2 = H, piperidinomethyl, morpholinomethyl, pyrrolidinomethyl, CH2NEt2, NO2; R3 = N:CHNMe2). The reaction of I (R1 = R2 = H, R3 = N:CHNMe2) with H2NOH.HCl gave N-(5-methyl-1,2,4-triazolo[1,5-a]pyrimid-7-yl)formamidoxime. The reaction of 7-hydrazino-5-methyl-1,2,4-triazolo[1,5-a]pyrimidine with Me2NCH(OMe)2 gave only the methylated product, i.e., N,N-dimethyl-N'-(5-methyl-1,2,4-triazolo[1,5-a]pyrimid-7-yl)formamidrazone. The reaction of 6-amino-5-methyl-1,2,4-triazolo[1,5-a]pyrimid-7(4H)one with Me2NCH(OMe)2 gave the amidrazone II.

IT 118973-83-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (amidination of, with DMF di-Me acetal, amidine from)

RN 118973-83-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-methyl-6-(4-morpholinylmethyl)-(9CI) (CA INDEX NAME)

L3 ANSWER 53 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:631404 CAPLUS

DOCUMENT NUMBER: 113:231404

TITLE: Preparation of bis-(7-amino-5-methyl-2-substituted-

1,2,4-triazolo[1,5-a]pyrimid-6-yl)methanes

INVENTOR(S): Lippmann, Eberhard; Hempel, Ute; Tenor, Ernst; Thomas,

Eckhard

PATENT ASSIGNEE(S): VEB Deutsches Hydrierwerk Rodleben, Ger. Dem. Rep.

SOURCE: Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE: Patent

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DD 276284 A1 19900221 DD 1988-319295 19880830

PRIORITY APPLN. INFO: DD 1988-319295 19880830

OTHER SOURCE(S): CASREACT 113:231404; MARPAT 113:231404

GI

AB The title compds. (I; R = H, alkyl, aralkyl, aryl; R1, R2 = H, alkyl; NR1R2 = piperidino, morpholino, pyrrolidino, etc.), were prepd. by treatment of the corresponding dihalo compds. with excess HNR1R2 at 50-100.degree. Thus, bis(1-chloro-5-methyl-1,2,4-triazolo[1,5-a]pyrimid-6-yl)methane and piperidine were refluxed 5 days to give 58% I (R = H, NR1R2 = piperidino).

IT 130541-16-1P

RN 130541-16-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 6,6'-methylenebis[5-methyl-7-(4-morpholinyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 54 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:606633 CAPLUS

DOCUMENT NUMBER: 113:206633

TITLE: New herbicidal derivatives of 1,2,4-triazolo[1,5-

a]pyrimidine

AUTHOR(S): Kleschick, William A.; Costales, Mark J.; Dunbar,

Joseph E.; Meikle, Richard W.; Monte, William T.; Pearson, Norman R.; Snider, Sigrid W.; Vinogradoff,

Anna P.

CORPORATE SOURCE: Agric. Prod. Dep., Dow Chem. USA, Walnut Creek, CA,

94598, USA

SOURCE: Pesticide Science (1990), 29(3), 341-55

CODEN: PSSCBG; ISSN: 0031-613X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB N-(1,2,4-Triazolo][1,5-a]pyrimidino)benzenesulfonamide (I) and N-phenyl-5,7-dimethyl-1,2,4-triazolo[1,5-a]pyrimidine-2-sulfonamide analogs were prepd. and their herbicidal activities and mode of action were related to known sulfonylurea and imidazolinone herbicides. The effect of these compds. on branched-chain amino acid biosynthesis and on acetolactate synthase was examd. in I, the herbicidal activity varied according to position of Cl substitution on the Ph ring; substitution at the ortho-position produced the highest levels of herbicidal activity against Abutilon theophrasti. Structure-activity relationships of these compds. are discussed.

IT 99452-94-5P

L3

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and herbicidal activity of, structure in relation to)

RN 99452-94-5 CAPLUS

CN Benzenesulfonamide, 2,6-dichloro-N-(5,6,7-trimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)- (9CI) (CA INDEX NAME)

09/ 895,975

ACCESSION NUMBER: 1990:478352 CAPLUS

DOCUMENT NUMBER: 113:78352

TITLE: Triazoles. XIX. The reaction of 5-amino-1,2,4-

triazoles with functionalized acetoacetic esters

AUTHOR(S): Reiter, Jozsef; Pongo, Laszlo; Somorai, Tamas;

Pallagi, Istvan

CORPORATE SOURCE: EGIS Pharm., Budapest, H-1475, Hung.

SOURCE: Monatshefte fuer Chemie (1990), 121(2-3), 173-87

CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:78352

Ι

GI

AB The treatment of R1COCHR2CO2Et (R1 = Me, Ph, C1CH2; R2 = H, Me, EtO2CCH2,

Et02CCH2CH2, Cl) with 5-amino-1H-1,2,4-triazoles gave triazolopyrimidinones I (same R1, R2; R3 = Me2N, Et2N, piperidino,

octylthio, benzylamino, MeS, etc). The reaction of 5-amino-3-(methylthio)-1H-1,2,4-triazole with MeCOCH(CH2CH2CO2Et)CO2Et gave 6-[(1-

ethoxycarbonyl)ethyl]-5-methyl-2-(methylthio)-1,2,4-triazolopyrimidin-7(8H)-one and diazepinone II.

IT 128626-91-5P

RN 128626-91-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-acetic acid, 1,5-dihydro-.alpha.,7-dimethyl-2-(methylthio)-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)

EtO-C-CH NH SME

L3 ANSWER 56 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:72178 CAPLUS

DOCUMENT NUMBER: 112:72178

TITLE: The chemistry and biochemistry of

triazolopyrimidinesulfonanilides, a new class of

acetolactate synthase inhibitors

AUTHOR(S): Kleschick, William A.; Gerwick, B. Clifford, III

CORPORATE SOURCE: Agric. Prod. Dep., Dow Chem. U. S. A., Walnut Creek,

CA, 94598, USA

SOURCE: BCPC Monograph (1989), 42 (Prospects Amino Acid

Biosynth. Inhib. Crop Prot. Pharm. Chem.), 139-46

09/895,975

CODEN: MBCCDO; ISSN: 0306-3941

DOCUMENT TYPE:

Journal English

LANGUAGE:

GΙ

R3 SO<sub>2</sub>NH N R R1

$$R^{3}$$
 NHSO<sub>2</sub>  $N$   $N$   $R^{2}$  II

AB A no. of 1,2,4-triazolo[1,5-a]pyrimidinylarenesulfonamides (I, R, R1, R2, R3 = different substituents) were prepd. by conventional and newly devised synthetic approaches. Compds. from this group which are substituted with electron withdrawing groups at the ortho position of the Ph ring and Me groups at the 5- and 7- positions of the heterocyclic ring exhibited significant herbicidal activity. These materials also inhibited acetolactate synthase (ALS). In pursuing further structural modifications of I, a large no. of 1,2,4-triazolo[1,5-a]pyrimidine-2-sulfonanilides (II) were prepd. II were prepd. by a convergent synthetic route involving the intermediacy of some novel 2-mercapto or 2-benzylthio-1,2,4-triazolo[1,5-a]pyrimidines. II displayed a very high levels of herbicidal activity and are potent inhibitors of ALS.

IT 98966-99-5P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and herbicidal activity of, structure in relation to)

RN 98966-99-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl)-5,6,7-trimethyl- (9CI) (CA INDEX NAME)

L3 ANSWER 57 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:644151 CAPLUS

DOCUMENT NUMBER: 111:244151

TITLE: Method of Lippmann emulsion preparation INVENTOR(S): Ruzek, Jiri; Stavek, Jiri; Sipek, Milan

PATENT ASSIGNEE(S): Czech.

09/895,975

SOURCE:

Czech., 5 pp.

DOCUMENT TYPE:

CODEN: CZXXA9

LANGUAGE:

Czech

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

CS 255602 B1 19880315 CS 1985-3687 19850523

CS 1985-3687 PRIORITY APPLN. INFO.: 19850523 Photog. Lippmann emulsions comprise Ag halides (e.g. AgBr, AgCl, or mixed Ag halides) pptd. in the presence of 10-4-10-1 mol/mol Ag halide compds. featuring a simple or substituted or condensed heterocycle with .gtoreq.1 N atom (e.g. imidazole, benzimidazole, naphthoimidazole, pyridine, quinoline, pyrazole, tetrazole, or azaindolizine), possibly with a C1-20 linear or branched-chain substituent, C1-20 cyclic alkyl, mono- or bicyclic aryl, NH2, OH, C1-20 alkoxy, CN, CO2H, C2-20 alkylcarbonyl, 5- or 6-membered heterocycle contg. O or S, C1-6 alkylthio, or carbamoyl (possibly substituted with an aliph. or arom. group or halogens) groups. Thus, Lippmann emulsions comprising AgBr 10, AgI 0.37, and gelatin 50 g in 1 L aq. soln. were prepd. by double-jet pptn. In the presence of 2.23 .times. 10-2 mol/mol Ag halide of a growth-controlling agent, an av. crystal size of 26-43 nm was obtained vs. 67 nm for the emulsion prepd. in the absence of the growth-controlling agent.

IT 3135-09-9

RL: USES (Uses)

(grain growth-controlling agent, in Lippmann photog. emulsion prodn.)

RN 3135-09-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-5-oxo-(9CI) (CA INDEX NAME)

L3 ANSWER 58 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1989:515204 CAPLUS

DOCUMENT NUMBER:

111:115204

TITLE:

Preparation of N, N-dimethyl-N'-(5-methyl-1, 2, 4-

triazolo[1,5-a]pyrimid-7-yl]formamidines

INVENTOR (S):

Hempel, Ute; Lippmann, Eberhard; Stopp, Helga; Tenor,

Ernst; Thomas, Eckhard

PATENT ASSIGNEE(S):

VEB Deutsches Hydrierwerk Rodleben, Ger. Dem. Rep.

SOURCE:

Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DD 264438 A1 19890201 DD 1987-306940 19870914

PRIORITY APPLN. INFO.:

DD 1987-306940 19870914

OTHER SOURCE(S): CASREACT 111:115204; MARPAT 111:115204

GI

$$R^2$$
 $N$ 
 $N$ 
 $R^1$ 
 $Me$ 
 $N$ 

AB The title compds. (I; R = N:CHNMe2; R1 = H, alkyl; R2 = H, piperidinomethyl, morpholinomethyl, pyrrolidinomethyl, CH2NEt2) were prepd. by condensation of I (R = NH2) with HC(OMe)2NMe2 (II). Thus, I (R = NH2, R1 = R2 = H) was refluxed 2 h with II in PhMe to give 66% (R = N:CHNMe2, R1 = R2 = H).

IT 122375-46-6P

RN 122375-46-6 CAPLUS

CN Methanimidamide, N,N-dimethyl-N'-[5-methyl-6-(4-morpholinylmethyl)[1,2,4]triazolo[1,5-a]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L3 ANSWER 59 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1989:515202 CAPLUS

DOCUMENT NUMBER:

111:115202

TITLE:

2-(Benzenesulfonamido)-1,2,4-triazolo[1,5-

a)pyrimidines and methods of controlling undesired

vegetation

INVENTOR(S):

Kleschick, William A. Dow Chemical Co., USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 16 pp. Cont. of U.S. Ser. No. 773,406,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 4822404 Α 19890418 US 1987-111003 19871020 PRIORITY APPLN. INFO.: US 1985-773406 19850906 OTHER SOURCE(S): CASREACT 111:115202; MARPAT 111:115202 GΙ

AB The title compds. (I; R1 = halo, NO2, CF3, cyano, CO2H, C1-4 alkoxycarbonyl; R2 = H, halo, C1-4 alkyl; R3 = H, C1-4 alkoxy, halo; X, Z = H, Me, C1-2 alkoxy; provided that X and Z cannot both be H) were prepd. as herbicides. A suspension of N'-cyano-N-(2-nitrophenylsulfinyl)-S-methylisothiourea in MeCN was treated with anhyd. hydrazine and the mixt. was stirred for 9 days to give 57% N-(5-amino-1,2,4-triazol-3-yl)-2-nitrobenzenesulfonamide which was refluxed with 2,4-pentanedione in AcOH to give 82% I (R1 = NO2, R2 = R3 = H, X = Z = Me). I at 0.25-10.0 lb/acre showed no or 10-100% preemergent control of 10 weeds such as Datura stramonium, Ipomoea spp., Amaranthus spp., and Digitalia spp. gave no or 10-100% damage to 8 crops such as cotton, rape, and corn.

IT 99452-93-4P

CN

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

RN 99452-93-4 CAPLUS

Benzenesulfonamide, 2-chloro-N-(5,6,7-trimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)- (9CI) (CA INDEX NAME)

ANSWER 60 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:515131 CAPLUS

DOCUMENT NUMBER: 111:115131

TITLE: Chemotherapeutic agents. Part XIII. Synthesis of

2-pyridyl-1,2,4-triazolo[1,5-a]pyrimidines as

antimicrobial agents

AUTHOR(S): Ram, Vishnu J.; Kushwaha, D. S.; Mishra, Lallan

CORPORATE SOURCE: Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, 226

001, India

SOURCE: Indian Journal of Chemistry, Section B: Organic

Chemistry Including Medicinal Chemistry (1989),

28B(3), 242-6

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:115131

GI

$$N-N$$
 $N-N$ 
 $N+N$ 
 $N+2$ 
 $N+1$ 
 $N+2$ 
 $N+2$ 
 $N+3$ 
 $N+4$ 
 $N+3$ 
 $N+4$ 
 $N+4$ 

A variety of substituted pyridyltriazolopyrimidines, e.g., I (R = NHNH2, AΒ arylamino, NHN: CMeCH2CO2Et, SH, Cl), were prepd. from amino(pyridyl)triazole II via cyclocondensation reactions and subsequent derivatization. None of the products exhibited significant antibacterial or antifungal activity.

IT 122484-54-2P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antimicrobial activity of)

RN 122484-54-2 CAPLUS

> [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-amino-2-(3pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 61 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:447999 CAPLUS

DOCUMENT NUMBER: 111:47999

TITLE: Silver halide photographic material with improved

storage stability by an incorporated stabilizer of

hydroxy-triazolo-pyrimidine type Kojima, Tetsuo; Mifune, Hiroyuki

INVENTOR (S): PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KTND DATE APPLICATION NO. DATE -----JP 63246739 A2 19881013 JP 1987-80084 19870401 PRIORITY APPLN. INFO.: JP 1987-80084 19870401 OTHER SOURCE(S): MARPAT 111:47999

GI

Ŕ1

III

The claimed photog. material having .gtoreq.1 supported Ag halide emulsion AB layer contg. .gtoreq.1 compd. selected from I, II, III or IV [R-R2 = H, halo, cyano, amino, hydroxy, alkyl, alkenyl, aralkyl, aryl, alkylthio, alkoxy, alkylamino, alkoxycarboxyl, carboxylic acid residue or its salt, R3ZZ1Z2mZ3n (R3 = alkyl, alkenyl, aralkyl or aryl; Z1, Z3 = alkylene; Z = O, S; Z2 = O, S, OC:O, NR4C:O, NR5C:ONR6, NR7C:SNR8, OC:ONR9, C:ONR10, SO2NR11; m, n = 0, 1; R4-R11 = H, alkyl, alkenyl, aralkyl, aryl). It prevents the photog. material on the shelf from deterioration of the photog. properties such as fog generation and speed loss. Thus, a chem. and spectrally sensitized emulsion was added with I (R = Me; R1 = H; R2 = SCH2SCH3), and coated on a cellulose acetate film base to make a black-and-white photog. film. Upon accelerated aging followed by development with a phenidone -hydroquinone developer for medical radiog., it showed the mentioned advantage.

121062-44-0P IT

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, triazolopyrimidine deriv. from, as photog. fog inhibitor)

IV

RN121062-44-0 CAPLUS

CN[1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 1,5-dihydro-7-methyl-2-[[(methylthio)methyl]thio]-5-oxo- (9CI) (CA INDEX NAME)

$$Me$$
 $N = S - CH_2 - SMe$ 
 $N = NH$ 

ANSWER 62 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:212752 CAPLUS

DOCUMENT NUMBER: 110:212752

TITLE: Chemotherapeutic agents. Part X. Synthesis of

2-pyridyl[1,2,4]triazolo[1,5-a]pyrimidines as

leishmanicides

AUTHOR(S): Ram, Vishnu J.

CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, 226 001, India SOURCE: Indian Journal of Chemistry, Section B: Organic

Chemistry Including Medicinal Chemistry (1988),

27B(9), 825-9

CODEN: IJSBDB; ISSN: 0376-4699

09/ 895,975

DOCUMENT TYPE: LANGUAGE: Journal English

OTHER SOURCE(S):

CASREACT 110:212752

GI

AB 2-Pyridyl-7-hydroxy-5-methyl[1,2,4]triazolo[1,5-a]pyrimidines I (R = 2-, 4-pyridyl; R1 = OH, R2 = H) (II) were prepd. by condensation of triazoles III with Et acetoacetate in acetic acid and transformed into 2-pyridyl-7-chloro-5-methyl[1,2,4]triazolo[1,5-a]pyrimidines I (R = 2-, 4-pyridyl, R1 = Cl, R2 = H) (IV) with phosphoryl chloride. Nucleophilic displacement of the chloro group in IV by amines and hydrazine gave I (R1 = Ph, substituted Ph, 4-methylpiperazino, NHNH2, R2 = H) resp. Boiling of IV with thiourea in ethanol gave 2-pyridyl-7-mercapto-5-methyl[1,2,4]triazolo[1,5-a]pyrimidine I (R1 = SH, R2 = H). Condensation of II with acetylacetone, ethoxymethylenemalononitrile, Et ethoxymethylenecyanoacetate and di-Et ethoxymethylenemalonate gave I (R1 = Me, R2 = H; R1 = NH2, R2 = cyano, CO2Et; R1 = OH, R2 = CO2Et), resp.

IT 120564-72-9P

RN 120564-72-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-2-(4-pyridinyl)-(9CI) (CA INDEX NAME)

L3 ANSWER 63 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:154317 CAPLUS

DOCUMENT NUMBER: 110:154317

TITLE: Preparation of 7-amino-6-aminoalkyl-5-methyl-s-

triazolo(1,5-a)pyrimidines as bioactive compounds and

intermediates

INVENTOR(S): Hempel, Ute; Lippmann, Eberhard; Stopp, Helga; Tenor,

Ernst; Thomas, Eckhard

PATENT ASSIGNEE(S): VEB Deutsches Hydrierwerk Rodleben, Ger. Dem. Rep.

SOURCE: Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DD 256328 A1 19880504 DD 1986-298542 19861224

09/ 895,975

PRIORITY APPLN. INFO.: DD 1986-298542 19861224

OTHER SOURCE(S): CASREACT 110:154317; MARPAT 110:154317

GΙ

The title compds. (I; R = piperidin-1-ylmethyl, morpholin-4-ylmethyl, pyrrolidin-1-ylmethyl, Et2NHCH2; R1 = piperidin-1-yl, morpholin-4-yl, pyrrolidin-1-yl, Me2N, Et2N, PhCH2NH, NH(CH2)7Me) useful as bioactive compds. and intermediates, were prepd. from the corresponding 7-halo compds. 7-Chloro-5-methyl-6-pyrrolidinomethyl-s-triazolo(1,5-a]pyrimidine was heated 5 h with morpholine on a water bath to give 29% 5-methyl-7-morpholino-6-pyrrolidinomethyl-s-triazolo(1,5-a]pyrimidine.

IT 119741-32-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as bioactive compd. and intermediate)

RN 119741-32-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5-methyl-7-(4-morpholinyl)-6-(1-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 64 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:154316 CAPLUS

DOCUMENT NUMBER: 110:154316

TITLE: Preparation of 7-substituted-6-aminoalkyl-5-methyl-s-

triazolo(1,5-a)pyrimidines as bioactive compounds and

intermediates

INVENTOR(S): Hempel, Ute; Lippmann, Eberhard; Steinmueller, Eva

Maria; Stopp, Helga; Tenor, Ernst; Thomas, Eckhard VEB Deutsches Hydrierwerk Rodleben, Ger. Dem. Rep.

PATENT ASSIGNEE(S): VEB Deutsches Hydrierwerk Rodlebe

SOURCE: Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DD 256327 A1 19880504 DD 1986-298541 19861224

PRIORITY APPLN. INFO: DD 1986-298541 19861224

OTHER SOURCE(S): CASREACT 110:154316; MARPAT 110:154316

GI

The title compds. (I; R = piperidin-1-ylmethyl, morpholin-4-ylmethyl, AB pyrrolidin-1-ylmethyl, Et2NCH2; R1 = 1-piperidinyl, 4-morpholino, 1-pyrrolidinyl, Et2N, Me2N, PhCH2NH, Me(CH2)7NH), useful as bioactive compds. and intermediates, were prepd. by amination of the corresponding 7-halo derivs. A mixt. of 7-chloro-5-methyl-6-morpholinomethyl-striazolo(1,5-a]pyrimidine, morpholine, and Et3N was refluxed 5 h in Et0H to give 49% 5-methyl-7-morpholino-6-morpholinomethyl-s-triazolo(1,5a) pyrimidine.

ΙŤ 119765-51-4P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as bioactive compd. and intermediate)

RN119765-51-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5-methyl-7-(4-morpholinyl)-6-(4morpholinylmethyl) - (9CI) (CA INDEX NAME)

L3 ANSWER 65 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:95261 CAPLUS

DOCUMENT NUMBER: 110:95261

TITLE: Process for preparation of 7-amino-6-(aminomethyl)-5-

methyl-s-triazolo[1,5-a]pyrimidines

INVENTOR(S): Hempel, Ute; Lippmann, Eberhard; Stopp, Helga; Tenor,

Ernst; Thomas, Eckhard

PATENT ASSIGNEE(S): VEB Deutsches Hydrierwerk Rodleben, Ger. Dem. Rep.

SOURCE: Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----DD 257829 A1 19880629 DD 1987-300085 19870220 PRIORITY APPLN. INFO.: DD 1987-300085 OTHER SOURCE(S): CASREACT 110:95261; MARPAT 110:95261

GI

AB The title compds. (I; R = NH2; R1 = Et2N, piperidino, morpholino, pyrrolidinyl), useful as active compds. or their intermediates (no data), were prepd. by aminolysis of I (R = Bu, C1) with gaseous NH3. Thus, NH3 was bubbled into a soln. of I (R = C1, R1 = morpholino) in EtOH at 15-40.degree. over 2-3 h to give 88% I (R = NH2, R1 = morpholino).

IT 118973-83-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 118973-83-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-methyl-6-(4-morpholinylmethyl)-(9CI) (CA INDEX NAME)

L3 ANSWER 66 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:601300 CAPLUS

DOCUMENT NUMBER: 109:201300

TITLE: Negative image formation using photographic material

for use under safelight illumination

INVENTOR(S): Takahashi, Toshiro; Kameoka, Kimitaka; Ukai, Toshinao;

Yagihara, Morio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_ \_ \_ \_ -----------JP 63103235 A2 19880507 JP 1986-249160 19861020 PRIORITY APPLN. INFO.: JP 1986-249160 19861020

AB Neg. image formation is effected by imagewise exposing at .gtoreq.370 nm a Ag halide photog. material comprising .gtoreq.1 Ag halide emulsion layers contg. .gtoreq.90 mol.% AgCl and contg. in the Ag halide emulsion layer or a sep. hydrophilic colloid layer .gtoreq.1 org. desensitizer(s) contg. .gtoreq.1 water-sol. group(s) or an alk. ionizable group and a dye with absorption max. at 300-500 nm. The materials showed only low fogging on handling under a safelight.

IT 115878-08-5

RL: USES (Uses)

(photog. sensitizers, for neg. films for use in safe light)

RN 115878-08-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 2-[(2,4-dinitrophenyl)thio]-1,5-dihydro-7-methyl-5-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & H & NO_2 \\
 & NO_2 & NO_2 \\
 & Me & NO_2
\end{array}$$

L3 ANSWER 67 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:590354 CAPLUS

DOCUMENT NUMBER: 109:190354

TITLE: Reactions of .alpha.-substituted cinnamonitriles: a

novel synthesis of polysubstituted

s-triazolo[1,5-a]pyrimidines

AUTHOR(S): Hussain, Sohair M.; Ali, Ahmed S.; El-Reedy, Ahmed M.

CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt

SOURCE: Indian Journal of Chemistry, Section B: Organic

Chemistry Including Medicinal Chemistry (1988),

27B(5), 421-3

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:190354

GΙ

- AB Title compds. I (R = Ph, cyano; R1 = H, OMe, Cl) were prepd. by the cyclocondensation reactions of 2-amino-5-methyl-1H-1,3,4-triazole (II) with acylcinnamonitriles. E.g., II was treated with PhCH:C(COPh)CN in pyridine to give I (R = Ph, R1 = H). I (R = NH2, R1 = H) was prepd. from II and PhCH:C(CN)2.
- IT 117134-99-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
RN 117134-99-3 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 1,5-dihydro-2-methyl-5-oxo-7-phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 68 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:483276 CAPLUS

DOCUMENT NUMBER: 109:83276

TITLE: Negative silver halide photographic material with

superhigh contrast

INVENTOR(S): Katoh, Kazunobu; Takagi, Yoshihiro; Kameoka, Kimitaka;

Miyata, Junji; Ukai, Toshinao

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Ger. Offen., 37 pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3729724	A1	19880331	DE 1987-3729724	19870904
DE 3729724	C2	19990422		
JP 63064039	A2	19880322	JP 1986-209169	19860905
JP 07031381	B4	19950410		
US 4908293	Α	19900313	US 1987-93341	19870904
PRIORITY APPLN. INFO.	:		JP 1986-209169	19860905
GI				

tert-
$$C_5H_{11}$$
 — O(CH<sub>2</sub>)<sub>3</sub>NHCONH — NHNHCHO

H
N
S
NO<sub>2</sub>

 $NO_2$ 

AB Ag halide photog. materials of the neg. type having a super-high contrast are composed of a support with .gtoreq.1 Ag emulsion layer, wherein the emulsion layer or another hydrophilic colloid layer contains .gtoreq.1 hydrazine deriv. and .gtoreq.1 org. desensitizer with .gtoreq.1 water-sol. group or a group capable of dissocg. in alkali. The material shows a decreased sensitivity so that it is suitable for processing or development under room light conditions. Thus, a polyester support was coated with a 2-methyl-4-hydroxy-1,3,3a,7-tetraazaindene-stabilized, NH4RhCl6-contg.

II

Ι

(-1.2 units). IT 115878-08-5

HOas

RL: USES (Uses)

(neg. photog. material contg. hydrazine deriv. and, for superhigh contrast)

gelatin-AgCl emulsion contg. I and II. The resultant material was then exposed and processed to show a contrast of 15 and decreased sensitivity

RN 115878-08-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 2-[(2,4-dinitrophenyl)thio]-1,5-dihydro-7-methyl-5-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

L3 ANSWER 69 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:406536 CAPLUS

DOCUMENT NUMBER: 109:6536

TITLE: Preparation of 1H-1,2,4-triazole-3-sulfonamides and

[1,2,4]triazolo[1,5-a]pyrimidine-2-sulfonamides as

herbicides

INVENTOR(S): Monte, William T.

PATENT ASSIGNEE(S): Dow Chemical Co., USA

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 244847	A1	19871111	EP 1987-106560	19870506
R: BE, CH,	DE, ES	, FR, GB, IT, L	I, NL	
US 4734123	A	19880329	US 1986-860159	19860506
AU 8771703	A1	19871112	AU 1987-71703	19870416
HU 47086	A2	19890130	HU 1987-2011	19870505
JP 62277367	A2	19871202	JP 1987-110384	19870506
BR 8702278	Α	19880217	BR 1987-2278	19870506
CN 87104679	Α	19880713	CN 1987-104679	19870506
PRIORITY APPLN. INFO.	:	US	1986-860159	19860506
OTHER SOURCE(S):	CAS	SREACT 109:6536		

GI

$$R^2$$
 $R^2$ 
 $N-NH$ 
 $N+RO_2$ 
 $N+RO_2$ 

AB The title triazolesulfonamides I [R = H, XCO; R1-R5 = H, halo, NO2, amino, (un)modified CO2H, SO3H, (un)substituted alkyl, alkoxy, (hetero)aryl, aryloxy, alkylsulfonyl, etc.; X = H, C1-6 alkyl, (un)substituted aryl] were prepd. as herbicides by oxidative cleavage of

triazolopyrimidinesulfonamides II [R6 = mono- or bicyclic (hetero)aryl with electron-withdrawing substituents; R7-R9 = H, C1-4 (halo)alkyl, (un) substituted aryl]. The latter are also effective herbicides and may themselves be prepd. by cyclocondensation of I (R = H) with appropriate 1,3-dicarbonyl compds. II (R6 = 2,6-Cl2C6H3, R7 = R9 = Me, R8 = H) in aq. KOH was treated dropwise with 35% aq. H2O2 at 30-35.degree. to give 84% I (R = Ac, R1 = R5 = Cl, R2-R4 = H). The latter was refluxed in  $\overline{6}N$  HCl/THF to give 86% I (R = R2-R4 = H, R1 = R5 = C1) (III). At 2000 ppm postemergent III gave 100% control of Datura stramonium and 80% control of Cyperus esculentus.

IT 113171-43-0P

CN

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

113171-43-0 CAPLUS RN

[1,2,4]Triazolo[1,5-a]pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl)-7-(dimethylamino) -5,6-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 70 OF 110 CAPLUS COPYRIGHT 2003 ACS

1988:167410 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 108:167410

TITLE:

Triazoles. VIII. The reaction of 5-amino-1,2,4-triazoles with ethyl

2-cyano-3-ethoxyacrylate and 2-cyano-3-

ethoxyacrylonitrile

AUTHOR(S): Reiter, Jozsef; Pongo, Laszlo; Dvortsak, Peter

CORPORATE SOURCE: EGIS Pharm., Budapest, H-1475, Hung.

Journal of Heterocyclic Chemistry (1987), 24(4), SOURCE:

1149-54

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:167410

GI

$$H_2N$$
 $N$ 
 $R$ 

AB Cyclocondensation of aminotriazoles I (R = SMe, 4-ClC6H4CH2S, morpholino) with EtOCH:C(CN)R1 (R1 = CO2Et, cyano) gave triazolopyrimidine derivs. II. In the reaction of N-substituted 5-amino-1,2,4-triazoles with EtOCH:C(CN)CO2Et, the expected cyclization did not occur; instead, condensed derivs. III and IV were formed.

IT 113967-69-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with hydrochloric acid)

RN 113967-69-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-amino-2-(methylthio)-, monosodium salt (9CI) (CA INDEX NAME)

Na

L3 ANSWER 71 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:41738 CAPLUS

DOCUMENT NUMBER: 108:41738

TITLE: Triazolopyrimidine compounds for extraction of metals

INVENTOR(S): Quan, Peter Michael; Nelson, Anthony John

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Fr. Demande, 18 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

FR 2574432	A1	19860613	FR 1985-18322	19851211
FR 2574432	B1	19920619		
US 4675172	Α	19870623	US 1985-806458	19851209
CA 1257260	A1	19890711	CA 1985-497372	19851211
ES 549879	A1	19861016	ES 1985-549879	19851212
US 4739054	Α	19880419	US 1987-28747	19870323
PRIORITY APPLN. INFO.:			GB 1984-31305	19841212
			US 1985-806458	19851209

GI

Metals are extd. from aq. solns. contg. halide or pseudohalide anions by contacting with a substituted triazolopyrimidine (I) (where R1 = C1-35 alkyl or substituted alkyl; R2 = H, C1-35 alkyl, substituted alkyl, aryl; R1 + R2 = 5-35 C; OR1 = OCH2CHR3R4; R3,R4 = alkyl; R4 contains .gtoreq.2 more C atoms). The procedure is useful for extn. of Cu, Co, Cd, and Zn. Thus, 6-ethoxycarbony-7-methyl-1,2,4-triazolo[2,3-a]pyrimidine 10 g was transesterified during 50 h with 2-hexyldecanol 12.1 g and tetrabutyltitanate 10 drops at 165.degree. followed by addn of the latter 5 drops to obtain I (where R1 = 2-hexyldecyl, R2 = Me). Then, an aq. soln. contg. 0.1 M CuCl2 (Cu 6.35 g/L), 0.1M HCl, and CaCl2.2H2O 700 g/L was treated 1.5 min with 0.2 M I soln. in Sohesso 150 solvent. The Cu recovery was 98%.

IT 112204-10-1P

RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. of, as extn. agent, for metal recovery from chloride-contg. aq.
 solns.)

RN 112204-10-1 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-methyl-, 2-heptyldecyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 72 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1987:544825 CAPLUS

DOCUMENT NUMBER: 107:144825

TITLE: Silver halide photographic emulsions with novel grain

faces (3)

INVENTOR(S): Maskasky, Joe Edward; Jones, Ralph Walter

PATENT ASSIGNEE(S): Eastman Kodak Co., USA SOURCE: Eur. Pat. Appl., 94 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

## PATENT INFORMATION:

	PA'	TENT I	. O <i>l</i>		KIND	DATE	APPLICATION NO.	DATE
	ED	2139	54		A2	19870311	EP 1986-306830	19860903
		2139			A3	19881130		
		2139			B1	19910731		
				DE.	FR, GE			
	US	4680		,	Α		US 1986-882112	19860703
		1281			A1	19910312		
		62124				19870605		
	-	12840			A1			
	CA	12840	051		A1	19910514	CA 1986-520478	19861015
	BR	86062	237		Α	19870929	BR 1986-6237	19861217
		86062			Α			
	ΕP	2274	14		A2	19870701		
	ΕP	22744	14		<b>A3</b>	19881130		
	ΕP	22744	14		В1	19920325		
		R:	AT,	BE,	CH, DE	FR, GB,	IT, LI, LU, NL, SE	
	EP	22825	56		A2	19870708	EP 1986-309921	19861218
	ΕP	22829	56		A3	19881130		
	EP	22829	56		B1	19920304		
		R:	AT,	BE,	CH, DE	FR, GB,	IT, LI, LU, NL, SE	
	ΕP	42384	10		A1	19910424	EP 1990-121599	19861218
	ΕP	42384			B1	19960221		
		R:	AT,	BE,	CH, DE		IT, LI, LU, NL, SE	
	AT	73240	)		E		AT 1986-309921	
		74217			E		AT 1986-309922	
					A2		JP 1986-301838	19861219
					B4			
		62163			A2			19861219
		04081			B4	19921224		
		47133			Α	19871215		
		47133			Α	19871215	US 1987-15270	19870217
PRIO	RITY	APPI	IN. 3	INFO.	:		US 1985-772229	19850903
								19851219
							US 1985-811133	19851219
							US 1986-882112	19860703
							EP 1986-309921 EP 1986-309922	19861218
	_				_			
$\Delta \mathbf{R}$	$\Delta \alpha$	nalic	ia ni	$n \cap r \cap c$	t Amiil	CIANC SEC	comprised of radiation	conditizzo

AB Ag halide photog. emulsions are comprised of radiation-sensitive Ag halide grains of a cubic crystal lattice structure comprised of trisoctahedral crystal faces exhibiting a [331] or [441] Miller index and prepd. using a grain growth modifier selected from 2-imidazolidine, ethylenethiourea, 5-(3-ethyl-2-benzothiazolinylidene)-1-methoxycarbonylmethyl-3-phenyl-2-thiohydantoin, and 1,3,3a,7-tetraazaindene derivs. The invention renders accessible a new choice of crystal faces for modifying photog. characteristics and improving interaction with sensitizers and adsorbed photog. addenda. Thus, an octahedral AgBr emulsion was dild. with H2O, an aq. soln. of 4-hydroxy-6-methyl-1,3,3a,7-tetraazaindene Na salt added, pH adjusted to 6.0, heated to 60.degree., pAg adjusted to 8.5 with KBr, and an aq. AgNO3 soln. added to give trisoctahedral emulsion grains having a Miller index of [331].

IT 3043-83-2, 5-Carboxy-6-hydroxy-4-methyl-2-methylthio-1,3,3a,7-tetraazaindene

RL: USES (Uses)

(crystal growth modifier, for prepn. of trisoctahedral silver halide grains for photog. emulsions)

RN 3043-83-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 1,5-dihydro-7-methyl-2-(methylthio)-5-oxo-(9CI) (CA INDEX NAME)

ANSWER 73 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1987:439860 CAPLUS

DOCUMENT NUMBER:

107:39860

TITLE:

(Triazolo[1,5-a]pyrimidin-2-yl)-2-

alkoxybenzenesulfonamides as herbicides and plant

growth regulators

INVENTOR(S):

Westermann, Juergen; Krueger, Martin; Arndt, Friedrich

Schering A.-G. , Fed. Rep. Ger.

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 13 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DE 3539386 Α1 19870514 DE 1985-3539386 19851104 PRIORITY APPLN. INFO.: DE 1985-3539386 19851104

$$R^{7}$$
 $R^{6}$ 
 $SO_{2}NR^{4}$ 
 $N$ 
 $N$ 
 $N$ 
 $R^{5}$ 
 $SO_{2}NH$ 
 $N$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{3}$ 
 $NH_{2}$ 
 $NH_{3}$ 
 $NH_{4}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 

AB The title compds. [I; R1 = alkyl, cycloalkyl, alkenyl, alkynyl, haloalkyl, cyanoalkyl, (CH2) mCO2R8, (CH2O) mR8; R2, R3 = H, halo, alkyl, alkoxy, alkylmercapto, SOR8, SO2R8, CO2R8, COSR8, CHO, cyano, NO2, amino, etc.; R4 = H, alkyl, COR8, CO2R8, CONHR9R10; R5, R6, R7 = OH, H, alkyl, alkoxy, alkylmercapto, amino, Cl, Br; R5, R6 or R6, R7 = (0-contg.) (CH2)n; R8 = (S- or O-substituted) alkyl, haloalkyl, cycloalkyl, Ph, PhCH2, alkenyl, alkynyl; R9, R10 = H, alkyl, atoms to complete a pyrrolidinyl, piperidinyl, or morpholinyl ring; m = 1, 2; n = 2-4] were prepd. as herbicides and plant growth regulators. Aminotriazolylbenzenesulfonamide II and acetylacetone were refluxed 2 h in HOAC to give 82% I (R1 = R5 = R7 = Me, R2 = R3 = R4 = R6 = H) (III). At 0.3 kg III/ha postemergence, Helianthus, Stellaria, Abutilon, Anaranthus, etc., were completely killed. IT 109053-42-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as herbicide and growth regulator)

RN 109053-42-1 CAPLUS

CN Benzenesulfonamide, 2-methoxy-N-(5,6,7-trimethyl[1,2,4]triazolo[1,5a]pyrimidin-2-yl)- (9CI) (CA INDEX NAME)

ANSWER 74 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1987:213971 CAPLUS

DOCUMENT NUMBER: 106:213971

TITLE: 7-Aminoazolo[1,5-a]pyrimidines, their preparation and

use as fungicides\_

INVENTOR(S): Graf, Hermann; Wahl, Peter; Rentzea, Costin; Sauter, Hubert; Ammermann, Eberhard; Pommer, Ernst Heinrich

BASF A.-G. , Fed. Rep. Ger. Ger. Offen., 12 pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT NO.			TE		API	PLICATION NO.	DATE
	3533050		A1 19				1985-3533050	
EP	215382		A1 19	870325		EΡ	1986-112217	19860904
EP	215382		B1 19	900801				
	R: AT,	BE, CH	, DE, F	R, GB,	IT, L	I, N	NL, SE	
AT	55131		E 19	900815		AT	1986-112217	19860904
CA	1288096		A1 19	910827		CA	1986-517820	19860909
JP	62067084		A2 19	870326		JP	1986-211809	19860910
IL	80004		Al 19	900712		$_{ m IL}$	1986-80004	19860910
$\mathtt{PL}$	148246		B2 19	890930		PL	1986-261406	19860915
AU	8662719		A1 19	870319		ΑU	1986-62719	19860916
AU	583150		B2 19	890420				
ZA	8607018		A 19	870527		$z_{A}$	1986-7018	19860916
HU	42289		A2 19	870728		HU	1986-3964	19860916
HU	201652		B 19	901228				
DD	249624		A5 19	870916		DD	1986-294440	19860916
CS	264282		B2 19	890613		CS	1986-6677	19860916
PRIORITY	APPLN.	INFO.:			DE	198	35-3533050	19850917
					EP	198	86-112217	19860904
CT							<b>-</b> ,	

GI

$$R^{1}$$
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 

C1 
$$OCH_2CH_2O(CH_2)_3$$
  $NH_2$   $NH_2$ 

The title compds. [I; A = N, R4C; R1 = (dialkylamino)alkyl, substituted AΒ alkoxyalkyl; R2, R3 = H, alkyl; R4 = H, alkyl Br, Cl] were prepd. as agrochem. fungicides by cyclocondensation of R2COCHR1R5 (R5 = alkoxycarbonyl, cyano) with aminoazole II, followed by ammonolysis in the case of the ketoester. 2,4,6-Cl3C6H2OCH2CH2O(CH2)3CHR6CN (III, R6 = H) was treated with BuLi and EtOAc in THF to give 73% III (R6 = MeCO). This was cyclocondensed with II (A = N, R3 = H) to give triazolopyrimidinamine IV. On grapes 0.05% IV gave 97% protection against Plasmopara viticola. IT 108258-57-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of as agrochem. fungicide)

RN 108258-57-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 5-methyl-6-[3-[2-(2,4,6trichlorophenoxy)ethoxy]propyl] - (9CI) (CA INDEX NAME)

ANSWER 75 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:626617 CAPLUS

DOCUMENT NUMBER: 105:226617

TITLE: Pyrazolo[1,5-a] - and [1,2,4]triazolo[1,5-a]pyrimidine

derivatives

INVENTOR (S): Hirai, Kentaro; Tsutsumiuchi, Masami

PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 61057587 19860324 JP 1984-181464 19840829 PRIORITY APPLN. INFO.: JP 1984-181464 19840829

OTHER SOURCE(S): CASREACT 105:226617 GI

CN

$$\mathbb{R}^3$$
 $\mathbb{Q}$ 
 $\mathbb{Q}$ 

The title compds. [I; R1 = H, alkanoyl, PhCO, (CH2CH:CHMeCH2)nH, (un)substituted alkyl, Ph, heterocyclyl; R2 = H, alkyl, (un)substituted Ph; R3, R4 = H, alkyl; X = N, CR5; R5 = H, alkyl, alkoxycarbonyl, Ph; Z1 = O, NH, S, S(O), S(O)2, (thio)alkyleneimino; Z2 = bond, CH2, NH; n = 2-5], useful as antiulcer agents, were prepd. Thus, a mixt. of 7-chloro-5,6-dimethyl-[1,2,4]triazolo[1,5-a]pyrimidine and QNH2.2HCl in EtOH was refluxed for 2 h to give 26% I (R1 = Q; R2 = R3 = Me; R4 = H; X = N; Z1 = NH; Z2 = bond). In rats 3-10 mg I/kg i.v. reduced stomach acid secretion 43-85.0%.

IT 104906-27-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as antiulcer agent)

RN 104906-27-6 CAPLUS

Guanidine, [4-[[[2-[(5,6-dimethyl[1,2,4]triazolo[1,5-a]pyrimidin-7-yl)amino]ethyl]thio]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 76 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1986:572503 CAPLUS

DOCUMENT NUMBER:

105:172503

TITLE:

Herbicidal 2-(arylsulfonamido)[1,2,4]triazolo[1,5-

a]pyrimidines

INVENTOR(S):

Kleschick, William A.; Vinogradoff, Anna P.; Dunbar,

Joseph E.

PATENT ASSIGNEE(S): Dow Chemical Co., USA Eur. Pat. Appl., 32 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	TENT NO.		KIND	DATE			APF	LICATION NO	٥.	DATE	
]	ΕP	188225		A1	19860	723		ΕP	1986-100188	3	19860108	į
]	ΕP	188225		B1	19880	107						
		R: BE,	DE, F	R, GB,	IT, I	NL						
7	UΑ	8551466		A1	19860	717		ΑU	1985-51466		19851219	ļ
1	US	4638075		Α	198703	120		US	1985-812612	2	19851223	
1	US	4650892		Α	198703	317		US	1985-812613	3	19851223	
	JΡ	61165364		A2	19860	726		JP	1986-6180		19860114	
Ţ	US	4772720		Α	198809	920		US	1986-894427	7	19860808	
RIOR:	ITY	APPLN.	INFO.:				US	198	5-691331		19850114	
HER	SC	URCE(S):		CAS	REACT	105:17	7250	3				
_												

GI

PR

$$R^{1}SO_{2}NH$$
 $N-NH$ 
 $N-NH$ 
 $N-N$ 
 $N+1$ 
 $N+1$ 

The reaction of R1SO2NH2 [R1 = (substituted) arom. or heteroarom. group] AB with (MeS)2C:NCN gives R1SO2NHC(SMe):NCN, which are treated with N2H4 to yield triazoles I. I underwent 2 cyclocondensation reactions with 1,3-dicarbonyl compds. to give title compds. II (R1 as above; R2-4 = H, alkyl, alkoxy, halo, etc.). Thus, I (R1 = 2-O2NC6H4), which was prepd. from 2-O2NC6H4SO2NHC(SMe):NCN and N2H4, was heated with MeCOCH2COMe in HOAc to give II (R1 = 2-O2NC6H4, R2 = R4 = Me, R3 = H). II are useful as herbicides (no data).

#### IT 99452-93-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

RN 99452-93-4 CAPLUS

Benzenesulfonamide, 2-chloro-N-(5,6,7-trimethyl[1,2,4]triazolo[1,5-CN a]pyrimidin-2-yl)- (9CI) (CA INDEX NAME)

09/ 895,975

L3 ANSWER 77 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:43097 CAPLUS

DOCUMENT NUMBER: 104:43097

TITLE: Silver halide photographic emulsions

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 60131533 A2 19850713 JP 1983-241344 19831220

PRIORITY APPLN. INFO.: JP 1983-241344 19831220

GI For diagram(s), see printed CA Issue.

Aq halide photog. emulsions contain Ag halide particle whose diam. is AB .qtoreq.5 times the thickness, .qtoreq.1 compd. of the formula I (R, R1, R2 = H, alkoxycarbonyl, carboxyalkyl, acylamino, alkyl, aralkyl; R1R2 combination may form a ring), and .gtoreq.1 sensitizer dye of the formula II (Z = group of atoms to complete a heterocyclic ring; R3 = alkyl, alkenyl, aralkyl, R4, R5 = H, alkyl, aralkyl, aryl; R4R3 and R5R4 combinations may form rings; when n .gtoreq.2, R5R2 and R4R4 may also combine to form rings; R6, R7 = electron attractive group; R6R7 in combination may form a ring; m = 0, 1, 2, 3; n = 0, 1). The emulsions exhibit excellent spectral sensitivity and are esp. useful for color photog. Thus, III (4.80 .times. 10-2 mol/kg emulsion) and IV (0.5 .times. 10-4 mol/kg emulsion) were added to a Ag(Br,I) emulsion contg. Ag halide particles with an diam./thickness ratio of 14.8 and the emulsion was coated on a film support. The resultant film was sensitometrically exposed and developed to give relative red sensitivity and fog of 502 and 0.10, resp., vs. 100 and 0.10, resp., for a III-free control.

IT 3135-09-9

RL: USES (Uses)

(photog. spectral sensitizer compns. contg. dye and)

RN 3135-09-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-5oxo- (9CI) (CA INDEX NAME)

ANSWER 78 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:5892 CAPLUS

DOCUMENT NUMBER: 104:5892

TITLE: Sulfonamides derived from substituted

2-amino-1,2,4-triazolo[1,5-a]pyrimidines and compositions and methods of controlling undesired

vegetation

INVENTOR(S): Kleschick, William A.
PATENT ASSIGNEE(S): Dow Chemical Co., USA
SOURCE: Eur. Pat. Appl., 65 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	NT NO.	KIND	DATE	APPLICATION NO.	DATE
		A2	10050007	ED 1005 200412	19850122
	50974		19850807	EP 1985-300413	19850122
EP 1.	50974	A3	19850821		
	R: AT, BE,	CH, DE,	FR, GB,	IT, LI, NL, SE	
CA 1:	244826	A1	19881115	CA 1985-472459	19850121
AU 8	537961	<b>A1</b>	19850801	AU 1985-37961	19850122
AU 5	75372	B2	19880728		
DK 8	500344	Α	19850727	DK 1985-344	19850125
BR 8	500350	Α	19850910	BR 1985-350	19850125
ZA 8	500616	Α	19860924	ZA 1985-616	19850125
JP 6	0185782	A2	19850921	JP 1985-13375	19850126
PRIORITY A	APPLN. INFO.	:		US 1984-574232	19840126

The title compds. [I; R = H, alkyl, alkenyl, alkynyl, acyl, R5C(X), R6SO2, (un)substituted aralkyl; R1 = (un)substituted aryl, heteroaryl; R2-R4 = H, (halo)alkyl, (halo)alkoxy, OH, halo, (esterified) CO2H, alkylthio, amino, (un)substituted aryl; adjacent R2-R4 = atoms required to complete a ring; R5 = alkyl, aryl, amino; R6 = alkyl, aryl; X = O, S] and their 5,6,7,8-tetrahydro derivs. were prepd. Thus 3,5-diamino-1,2,4-triazole and CH2(COMe)2 were refluxed in aq. NaOH to give 55% aminotriazolopyrimidine II (R7 = H) which was acylated with 2-thiophenesulfonyl chloride to give 6% II (R7 = 2-thienylsulfonyl) (III). In postemergence tests 1000 ppm III gave 100% control of, e.g., Datura stramonium.

# IT 99452-93-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)

RN 99452-93-4 CAPLUS

CN Benzenesulfonamide, 2-chloro-N-(5,6,7-trimethyl[1,2,4]triazolo[1,5-a]pyrimidin-2-yl)- (9CI) (CA INDEX NAME)

L3 ANSWER 79 OF 110 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1985:596117 CAPLUS

Ι

DOCUMENT NUMBER: 103:196117

09/ 895,975

TITLE:

Substituted 1,2,4-triazolo[1,5-a]pyrimidine-2-sulfonamides and compositions and methods of

controlling undesired vegetation and suppressing the

nitrification of ammonium nitrogen in soil

INVENTOR(S):

Kleschick, William A.; Ehr, Robert J.; Gerwick, Ben Clifford, III; Monte, William T.; Pearson, Norman R.;

APPLICATION NO. DATE

Costales, Mark J.; Meikle, Richard W.

PATENT ASSIGNEE(S):

SOURCE:

Dow Chemical Co., USA Eur. Pat. Appl., 277 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

KIND DATE

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

EP 142152						
EP 142152 A3 19861001 R: AT, BE, CH, DE, FR, IT, LI, NL, SE  AU 8435330 A1 19850523 AU 583799 B2 19890511 EP 330137 A1 19800830 EP 1989-102979 19841112 R: AT, BE, CH, DE, FR, IT, LI, NL, SE  AT 61803 E 19910415 IL 83139 A1 19930114 IL 1984-83139 19841112 IL 73486 A1 19930513 IL 1984-73486 19841112 BR 8405797 A 19850917 BR 1984-5797 19841112 BR 8405797 A 19850917 BR 1984-5797 19841113 CA 1231708 A1 19880119 CA 1984-467616 BP841114 DK 170442 B1 19950061 GB 1984-240379 19841114 DK 170442 B1 19950619 GB 1984-240379 19841114 DK 2149792 A1 19850619 GB 1984-240379 19841114 US 4740233 A 19880624 US 1986-931469 1986117 US 4741764 A 19880505 US 1986-931469 19861121 US 4755212 A 19880503 US 1988-933717 19861121 US 4785212 A 19880004 US 1986-934271 19861121 US 4755212 A 19880505 GB 1987-527880 19870121 GB 2196627 B2 19880505 GB 1987-527880 19870121 GB 2196628 B2 19880505 GB 1987-9294 19870121 GB 2196628 B2 19880505 GB 1987-9294 19870121 GB 2196628 B2 19880804 US 1988-2900 19880913 US 4983772 A 1991008 US 1988-261460 19881021 US 4954163 A 19900904 US 1988-21900 19880913 US 4983772 A 19910108 US 1988-261460 19881012 PRIORITY APPLN. INFO::  US 1988-261460 19841112 EP 1984-73486 19880121 EP 1						
R: AT, BE, CH, DE, FR, IT, LI, NL, SE AU 8435330					EP 1984-113656	19841112
R: AT, BE, CH, DE, FR, IT, LI, NL, SE AU 8435330	EP 142152	A3	19861001			
AU 8435330 A1 19850523 AU 1984-35330 19841112 AU 583799 B2 19890511 EP 330137 A1 19890830 EP 1989-102979 19841112 EP 330137 B1 19940302 R: AT, BE, CH, DE, FR, IT, LI, NL, SE  AT 61803 E 19910415 AT 1984-81339 19841112 IL 33139 A1 19930513 IL 1984-73486 19841112 IL 73486 A1 19930513 IL 1984-73486 19841112 AT 102181 E 19940315 AT 1989-102979 19841112 BR 8405797 A 19850917 BR 1984-5797 19841113 CA 1231708 A1 19880119 CA 1984-8844 19841113 CA 1231708 A1 19880119 CA 1984-8844 19841113 DK 8405413 A 19850515 DK 1984-5413 19841114 DK 8405413 A 19850515 DK 1984-5413 19841114 DK 34740742 B1 19850619 GB 1984-28740 19841114 GB 2149792 B2 19880518 JP 60116684 A2 19850624 JP 1984-240379 19841114 US 4740233 A 19880426 US 1986-931469 19861117 US 4740743 A 19880503 US 1983-933717 19861121 US 4741764 A 19880503 US 1983-933717 19861121 US 4741764 A 19880503 US 1986-934271 19861121 US 4752212 A 19880705 US 1986-934271 19861121 US 475212 A 19880001 GB 1987-9293 19870121 CA 1232269 A2 19880202 CA 1987-527878 19870121 CA 1232276 A2 19880202 CA 1987-527878 19870121 GB 2196627 A1 19880505 GB 1987-9293 19870416 GB 2196628 B2 19880824 AU 8822900 A1 19890105 AU 1988-22900 19880928 AU 613665 B2 19910808 US 4886883 A 19891212 US 1988-261460 19881021 US 4983772 A 19900904 US 1989-406666 19890913 US 4983772 A 19900904 US 1989-406666 19890913 US 4983772 A 19910108 US 1983-551758 1981114 EP 1984-113656 19841112 EP 1984-133656 19841112 EP 1984-133656 19841112 EP 1989-102979 19841112 EP 1984-133656 19890913 US 4983772 A 19910108 US 1983-551758 1981114 EP 1984-73486 19841112 EP 1984-73486 1990913 US 4983772 A 19910108 US 1983-66666 19890913 US 4984-86666 19809913 US 4984-86666 19809913 US 4984-86666 19809913 US 1988-766393 19850822					IL, SE	
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BR 8405797 A 1985-017 BR 1984-5797 19841113 ZA 8408844 A 19860730 ZA 1984-8844 19841113 CA 1231708 A1 19880119 CA 1984-467616 19841113 DK 8405413 A 19850515 DK 1984-5413 19841114 DK 170442 B1 19950904 GB 2149792 B2 19880518 JP 60116684 A2 19850624 JP 1984-240379 19841114 JP 06035459 B4 19940511 US 4740233 A 19880426 US 1986-931469 19861117 US 4741764 A 19880503 US 1983-933717 19861121 US 4755212 A 19880705 US 1986-934271 19861121 US 4818273 A 19880705 US 1986-934271 19861121 US 4818273 A 19880202 CA 1987-527878 19870121 CA 1232269 A2 19880202 CA 1987-527878 19870121 GB 2196627 A1 19880505 GB 1987-9293 19870416 GB 2196628 A1 19880505 GB 1987-9293 19870416 GB 2196628 B2 19880804 AU 8822900 A1 19880505 GB 1987-9294 19870416 GB 2196628 B2 19880804 AU 8822900 A1 19890105 AU 1988-22900 19880928 AU 613665 B2 19910808 US 4886883 A 19891212 US 1988-261460 19881021 US 4983772 A 19910108 US 1989-406666 19890913 PRIORITY APPLN. INFO.:	AT 61803	E	19910415		AT 1984-113656	
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US 1988-261460 19881021				US	1985-768393	19850822
US 1988-261460 19881021 OTHER SOURCE(S): CASREACT 103:196117						
OTHER SOURCE(S): CASREACT 103:196117				US	1988-261460	19881021
	OTHER SOURCE(S):	CAS	REACT 103	:1961	17	

GI

The title compds. [I; R = (substituted) (hetero)aryl; R1, R2, R3 = H, AB (halo)alkyl, OH, (substituted) alkoxy, (substituted) aryl, halo, alkylthio, arylthio, (substituted) amino, R1R2 or R2R3 may form a ring], useful as herbicides and inhibitors of nitrification of amino nitrogen in soil (effective at .gtoreq. 0.05 wt.%), were prepd. by various methods. Thus, stirring a mixt. of 2.78 g I [R = 2,3,6-Br(MeO2C)MeC6H2, R1 = R3 =Me, R2 = H), 30 mL 5% aq. NaOH, and 30 mL H2O at 25.degree. for 2.5 h gave, after acidification, 2.10 g I [R = 2,3,6-Br(HO2C)MeC6H2, R1 = R3 =Me, R2 = H].

IT 98966-99-5P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as herbicide and nitrification inhibitor)

98966-99-5 CAPLUS RN

[1,2,4] Triazolo [1,5-a] pyrimidine-2-sulfonamide, N-(2,6-dichlorophenyl) -CN5,6,7-trimethyl- (9CI) (CA INDEX NAME)

ANSWER 80 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:523428 CAPLUS

DOCUMENT NUMBER:

103:123428

TITLE:

Pyrimidine and fused pyrimidine derivatives. III. Synthesis of s-triazolo[1,5-a]pyrimidine derivatives

AUTHOR(S):

by using ketene dithioacetals Tominaga, Yoshinori; Sakai, Shuichiro; Kohra, Shinya;

Tsuka, Junko; Matsuda, Yoshiro; Kobayashi, Goro

CORPORATE SOURCE:

Fac. Pharm. Sci., Nagasaki Univ., Nagasaki, 852, Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (1985), 33(3),

962-70

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 103:123428

GI

AB Cyclocondensation of triazolamine I with ketene dithioacetals, e.g. (MeS)2C:C(CN)CO2Me gave triazolopyrimidines, e.g. II (R = SMe)(III). Amination of III gave the 7-(un)substituted amino derivs., e.g. II (R = NH2, NHPh, NEt2, morpholino, etc.).

IT 98190-26-2P

RN 98190-26-2 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carbonitrile, 7-amino-5-(methylthio)-(9CI) (CA INDEX NAME)

L3 ANSWER 81 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:437497 CAPLUS

DOCUMENT NUMBER: 103:37497

TITLE: 7-Aminoazolo[1,5-a]pyrimidines and fungicides

containing them

INVENTOR(S): Eicken, Karl; Graf, Hermann; Gramlich, Walter; Sauter,

Hubert; Rentzea, Costin; Pommer, Ernst Heinrich;

Ammermann, Eberhard

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3338292	<b>A</b> 1	19850502	DE 1983-3338292	19831021
EP 141317	A2	19850515	EP 1984-112283	19841012
EP 141317	Ą3	19860212		
EP 141317	B1	19880120		
R: AT, BE,	CH, DE	, FR, GB, IT,	LI, NL, SE	
AT 32077	E	19880215	AT 1984-112283	19841012
IL 73258	A1	19871130	IL 1984-73258	19841016
CA 1242715	<b>A1</b>	19881004	CA 1984-465567	19841016
JP 60104089	A2	19850608	JP 1984-216490	19841017
CS 248724	B2	19870212	CS 1984-7924	19841018
AU 8434526	A1	19850426	AU 1984-34526	19841019
AU 566960	B2	19871105		
ZA 8408175	A	19850626	ZA 1984-8175	19841019

09/ 895,975

DD	232635		A5	19860205		DD 1984-268556	19841019
$\mathtt{PL}$	137289		B2	19860531		PL 1984-250093	19841019
US	4617303		Α	19861014		US 1984-662592	19841019
HU	36328		A2	19850930		HU 1984-3942	19841022
HU	191964		В	19870428			
US	32676		E	19880524		US 1987-59254	19870603
PRIORIT	Y APPLN.	<pre>INFO.:</pre>			DE	1983-3338292	19831021
					EP	1984-112283	19841012
					US	1984-662592	19841019

OTHER SOURCE(S):

CASREACT 103:37497

GΙ

Title compds. I [R = NH2; R1 = alkyl, alkoxyalkyl, haloalkyl, (un)substituted arylalkyl; R2, R3 = H, alkyl; X = N, CR4; R4 = H, alkyl, halogen] were prepd. Thus, 200 g Me 2-n-octylacetoacetate was cyclocondensed with 94 g 3(5)-amino-5(3)-methylpyrazole in 400 mL BuOH to give 191 g I (R = OH, R1 = octyl, R2 = R3 = Me, X = CH), which (190 g) was refluxed 1.5 h in 550 mL POCl3 to give 179 g I (R = Cl). The latter compd. (179 g) in 1300 mL EtOH was placed in a 2.5 L autoclave, pressurized with 85 g NH3, and stirred 8 h at 150.degree. at 30 bar to give 133 g I (R = NH2), which at 0.025% gave 97% control of Plasmopara viticola on grapes.

IT 91637-28-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and fungicidal activity of)

RN 91637-28-4 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-7-amine, 6-hexyl-5-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 82 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:571281 CAPLUS

DOCUMENT NUMBER: 101:171281

TITLE: Triazolopyrimidines PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE JP 1982-204501 19821124 JP 59095289 A2 19840601 19900905 JP 02039512 B4 PRIORITY APPLN. INFO.: JP 1982-204501 19821124 OTHER SOURCE(S): CASREACT 101:171281 GI

$$R$$
 $R^{5}$ 
 $R^{6}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{1}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{3}$ 

The title compds. I (R = H, halo, alkyl, NO2, CF3; R1 = H, alkoxycarbonyl; R2 = NR5R6 where R5, R6 = H, alkyl or R5R6= a bond; R3, R4 = H, or R3R4 = a bond; or R2R4 = O), useful as Ca antagonists and antihypertensives (at 1 mg/kg i.v. in mice), were prepd., e.g., by reaction of benzylidenemalonates II (R7 = alkyl) with aminotriazole III. Thus, heating a mixt. of 3.46 g II (R = 2-Cl, R7 = Et) and 1.05 g III at 130.degree. for 5 hs. gave 2.52 g I (R = 2-Cl, R1 = EtO2C, R2R4 = O, R3 = R5 = R6 = H).

IT 92513-02-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antihypertensive activity of)

RN 92513-02-5 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-(2-chlorophenyl)-1,5-dihydro-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 83 OF 110 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1982:406244 CAPLUS

DOCUMENT NUMBER:

97:6244

TITLE:

Heterocyclic .beta.-enamino esters. 28. The reaction of heterocyclic .beta.-enamino esters and nitriles with cyclic amidines. A simple route to azolopyrimidines (1)

09/ 895,975

AUTHOR(S): Elnagdi, Mohamed H.; Wamhoff, Heinrich

CORPORATE SOURCE: Inst. Org. Chem. Biochem., Univ. Bonn, Bonn, D-5300/1,

Fed. Rep. Ger.

SOURCE: Journal of Heterocyclic Chemistry (1981), 18(7),

1287-92

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE:

Journal English

LANGUAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Whereas 2-amino-3-(ethoxycarbonyl)-4,5-dihydrofurans condense with 5-membered amidine derivs., via elimination of ethanol to afford the azolopyrimidines I (R = H, Me), II, and III (R = H, Me), the 2-amino-3-cyano-4,5-dihydrofurans give with the same reagents, under elimination of NH3, the novel ring systems of furoazolopyrimidines IV and V (R = H, Me). 2-Amino-3-ethoxycarbonyl-5,6-dihydro-4H-thiopyran reacts with 5-amino-1,2,4-triazole to yield the triazolo[1,5-a]pyrimidine VI, and with 2-aminobenzimidazole to give VII. III (R = Me) and VIII are cyclized in a secondary step to give the novel furo[2,3-d]benzimidazo[1,2-a]pyrimidine IX and furo[2,3-d]-1,2,4-triazolo[1,5-a]pyrimidine X, resp., besides the acetoxy derivs. XI and XII.

IT 78017-08-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and spectra of)

RN 78017-08-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-amino-6-(2-hydroxyethyl)-(9CI) (CA INDEX NAME)

L3 ANSWER 84 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1982:122736 CAPLUS

DOCUMENT NUMBER: 96:122736

TITLE: 2-(Alkylthio)-1,2,4-triazolo[1,5-a]pyrimidines as

adenosine 3',5'-monophosphate phosphodiesterase

inhibitors with potential as new cardiovascular agents

AUTHOR(S): Novinson, Thomas; Springer, Robert, H.; O'Brien, D.

E.; Scholten, Mieka B.; Miller, Jon P.; Robins, Roland

Κ.

CORPORATE SOURCE: Novitex Lab., Inc., Ventura, CA, 93003, USA

SOURCE: Journal of Medicinal Chemistry (1982), 25(4), 420-6

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

AB A series of new 2-(alkylthio)-5,7-disubstituted-1,2,4-triazolo[1,5-a]pyrimidines have been prepd. as inhibitors of cAMP phosphodiesterase (I) from various tissues. These derivs. were prepd. via ring closure of various 3-amino-1,2,4-triazole intermediates. 2-Benzylthio-5-methyl-7-(dimethylamino)-1,2,4-triazolo[1,5-a]pyrimidine (II) is 6.3 times as

potent as theophylline in inhibiting I from rabbit heart. Treatment of dogs i.v. with 5 mg/kg h of II gave a cardiac output increase of 69%, which was largely sustained for a 2-h period after administration of drug had ceased. There was no significant increase in heart rate upon administration of II. Related studies with 5,7-di-n-propyl-2-(benzylthio)-1,2,4-triazolo[1,5-a]pyrimidine in dogs showed a 31.5% increase in cardiac output with an increase in stroke vol. of 34.4% with no increase in heart rate. The specificity of action of these I inhibitors could be due to selective binding at a certain I site in the cardiovascular system. Several of these compds. are candidates for further studies with a view to clin. evaluation.

IT 51646-45-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclic AMP phosphodiesterase-inhibiting activity of)

RN 51646-45-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-(4-morpholinyl)-2-[(phenylmethyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 85 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1981:424975 CAPLUS

DOCUMENT NUMBER:

95:24975

TITLE:

Heterocyclic .beta.-enamino esters. 26. A novel

synthesis of azolopyrimidines

AUTHOR(S):

Elnagdi, Mohamed H.; Wamhoff, Heinrich

CORPORATE SOURCE:

Inst. Org. Chem. Biochem., Univ. Bonn, Bonn, D-5300/1,

Fed. Rep. Ger.

SOURCE:

Chemistry Letters (1981), (3), 419-22

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

$$_{\mathrm{R}}$$
  $_{\mathrm{O}}$   $_{\mathrm{NH}_{2}}$   $_{\mathrm{I}}$   $_{\mathrm{N}}$   $_{\mathrm{N}}$   $_{\mathrm{N}}$   $_{\mathrm{NH}_{2}}$   $_{\mathrm{II}}$ 

AB Azolopyrimidine derivs. were prepd. via reaction of heterocyclic .beta.-enamino esters with 2-amino heterocycles. E.g., treating furans I (R = H, Me) with 2-aminobenzimidazole gave 76-82% benzimidazopyrmidines II.

IT 78017-08-0P

78017-08-0 CAPLUS RN

[1,2,4]Triazolo[1,5-a]pyrimidin-5(1H)-one, 7-amino-6-(2-hydroxyethyl)-CN (9CI) (CA INDEX NAME)

ANSWER 86 OF 110 CAPLUS COPYRIGHT 2003 ACS

1980:506810 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 93:106810

Studies on cardiovascular agents. 6. Synthesis and TITLE:

coronary vasodilating and antihypertensive activities

of 1,2,4-triazolo[1,5-a]pyrimidines fused to

heterocyclic systems

Sato, Yasunobu; Shimoji, Yasuo; Fujita, Hiroshi; AUTHOR(S):

Nishino, Hiroshi; Mizuno, Hiroshi; Kobayashi,

Shinsaku; Kumakura, Seiji

CORPORATE SOURCE: Cent. Res. Lab., Sankyo Co., Ltd., Tokyo, Japan

Journal of Medicinal Chemistry (1980), 23(8), 927-37 SOURCE:

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

GT For diagram(s), see printed CA Issue.

AΒ The title compds. I (R1 = H, Me, Ph, substituted Ph; R2 = Me or cyclopropyl; R3 = H or Me; R4 = H, Me, or Et; R5 = H, alkyl, Ph, substituted Ph, CH2CH2OH, CH2CH2NEt2, etc.), II (R1 = H or Me; R2 = H, alkyl, or substituted benzyl), and III (A = O, S, NMe, etc.; B = CH2CH2, NHCH2CH2CH2, etc.) were synthesized by several methods and evaluated for antihypertensive activity in spontaneously hypertensive male rats, and coronary vasodilating activity in isolated guinea pig hearts. 8-tert-Butyl-7,8-dihydro-5-methyl-6H-pyrrolo[3,2-e][1,2,4]triazolo[1,5a]pyrimidine (IV) [62052-97-5] was more potent than trapidil in the coronary vasodilating test and equipotent to guanethidine sulfate in the antihypertensive test. IV was also evaluated in coronary blood flow and blood pressure in dogs. An increase of up to 5 C in the alkyl chain at position 8 increased vasodilating activity, whereas a C10 or C12 substituent resulted in vasoconstriction. The tert-Bu group at position 8 is important for antihypertensive activity. Structure-activity relations are discussed.

IT 74258-60-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and coronary vasodilating and antihypertensive activities of)

RN 74258-60-9 CAPLUS

[1,2,4]Triazolo[1,5-a]pyrimidine-6-acetic acid, 1,5-dihydro-.alpha.,7-CN

dimethyl-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 87 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1977:552262 CAPLUS

DOCUMENT NUMBER: 87:152262

TITLE: 2-Substituted-s-triazolo[1,5a]pyrimidines

INVENTOR(S): O'Brien, Darrell E.; Novinson, Thomas; Springer,

Robert H.

PATENT ASSIGNEE(S): ICN Pharmaceuticals, Inc., USA

SOURCE: U.S., 11 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 4036840	Α	19770719	US 1975-579832 19750522
AU 7355882	A1	19741121	AU 1973-55882 19730518
NL 7307573	Α	19731211	NL 1973-7573 19730530
ES 415389	A1	19760601	ES 1973-415389 19730530
GB 1423266	Α	19760204	GB 1973-26279 19730601
BE 800550	A1	19731001	BE 1973-131957 19730606
FR 2187295	A1	19740118	FR 1973-20569 19730606
CA 1010863	A1	19770524	CA 1973-173489 19730607
PRIORITY APPLN. INFO.	:		US 1972-260517 19720607

GI

$$\begin{array}{c|c} R & & N \\ \hline & N \\ \hline & N \\ \hline & R1 \\ \end{array} \qquad \begin{array}{c} R2 \\ \hline & I \\ \end{array}$$

AB Triazolopyrimidines I (R = 5-Me, 5-Pr, 6-CO2Et; R1 = Me, Pr, OH, Cl, amino, CH2Ac, SH; R2 = alkylthio, substituted alkylthio, substituted alkylsulfonyl) (50 compds.) were prepd. Thus, 3-amino-5-benzylthio-striazole was condensed with Ac2CH2 to give I (R = 5-Me, R1 = Me, R2 = SCH2Ph). I had coronary vasodilator, inotropic, muscle relaxant, antiinflammatory, antihypertensive, and 3',5'-cyclic AMP phosphodiesterase-inhibiting activity.

IT 51646-45-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and pharmacol. activity of)

RN 51646-45-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-(4-morpholinyl)-2-[(phenylmethyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

Eto-C 
$$N$$
  $N$   $S-CH_2-Ph$ 

ANSWER 88 OF 110 CAPLUS COPYRIGHT 2003 ACS

1976:421272 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

85:21272

Condensations with hydrazine-N, N'-dicarboxamidine, 20. TITLE:

Trisubstituted s-triazolo[1,5-a]pyrimidines

AUTHOR (S): Kreutzberger, Alfred; Kreutzberger, Elfriede

CORPORATE SOURCE: Inst. Pharm. Chem., Westfael. Wilhelms-Univ. Muenster,

Muenster, Fed. Rep. Ger.

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1976),

309(2), 148-52

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE:

Journal LANGUAGE: German

GI

$$\stackrel{\text{Me}}{\underset{\text{Me}}{\bigvee}} \stackrel{\text{NH}_2}{\underset{\text{N}}{\bigvee}}$$

AΒ Condensation of [H2NC(:NH)NH]2 with MeCOCMe:C(OH)Me at room temp. gave only hydrazodipyrimidine I in 26.5% yield, but at 100.degree./6 hr, 52% yield of triazolopyrimidine II was primarily obtained, besides a little I. Triazolopyrimidine III was formed as an intermediate which rearranged to II via ring-opening of the pyrimidine portion. II was unambiguously synthesized from MeCOCMe:C(OH)Me and 3,5-diamino-s-triazole.

IT 59444-02-9P

RN

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

III

59444-02-9 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidin-2-amine, 5,6,7-trimethyl- (9CI) (CA INDEX

L3 ANSWER 89 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1974:449629 CAPLUS

DOCUMENT NUMBER: 81:49629

TITLE: Condensation of protonated salts of

N-alkyl-substituted C-amino-s-triazoles with .beta.-diketones and .beta.-chlorovinyl ketones

AUTHOR(S): Golubushina, G. M.; Poshtaruk, G. N.; Chuiguk, V. A.

CORPORATE SOURCE: Kiev. Gos. Univ. im. Shevchenko, Kiev, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1974), (4),

565-9

CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE: Journal LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB Triazolopyrimidines I, II(R = H, Me; R1 = Me, Ph; R2 = H, Me; R3 = Me, H) were prepd. in 19-100% yields by condensing triazoles III, IV (R = H, Me) with a .beta.-di-or .beta.-chlorovinyl ketone. Condensation of triazolium perchlorate (V) with .beta.-diketones yielded 80-95% VI (R1 = Me, Ph; R2 = H, Et; R3 = Me, Ph). Structures of the condensation products were confirmed by PMR.

IT 53132-51-7P

RN 53132-51-7 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidinium, 3,5,6,7-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 53132-50-6 CMF C9 H13 N4

CM 2

CRN 14797-73-0 CMF Cl O4

L3 ANSWER 90 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1974:83040 CAPLUS

DOCUMENT NUMBER: 80:83040

TITLE: 2-(Substituted thio)-s-triazolo [1,5-a]pyrimidines

INVENTOR(S): O'Brien, Darell E.; Novinson, Thomas; Springer, Robert

Н.

PATENT ASSIGNEE(S): ICN Pharmaceuticals, Inc.

SOURCE: Ger. Offen., 25 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2327133	A1	19740103	DE 1973-2327133	19730528
AU 7355882	A1	19741121	AU 1973-55882	19730518
NL 7307573	Α	19731211	NL 1973-7573	19730530
ES 415389	A1	19760601	ES 1973-415389	19730530
GB 1423266	A	19760204	GB 1973-26279	19730601
BE 800550	A1	19731001	BE 1973-131957	19730606
FR 2187295	A1	19740118	FR 1973-20569	19730606
CA 1010863	A1	19770524	CA 1973-173489	19730607
PRIORITY APPLN.	INFO.:		US 1972-260517	19720607

GI For diagram(s), see printed CA Issue.

Triazolopyrimidines I (R = C1-4 alkyl, substituted benzyl, pyridylmethyl, quinolylmethyl, tetrahydrofurylmethyl, R1 = Me, R2 = 5-Me; R = CH2Ph, R1 = substituted amino, OH, Cl, R2 = 5-Me, 6-CO2Et) (40 compds.) were prepd. from 3-amino-5-mercapto-s-triazole (II). Thus II was benzylated and cyclized with acetylacetone, Et acetoacetate, or di-Et (ethoxymethylene)-malonate, followed by substitution in the 7-position or II was first subjected to the cyclization and then substituted in the 2-position. I are 3',5'-cyclic AMP phosphodiesterase inhibitors .ltoreq.10 times as effective as theophyllin.

IT 51646-45-8P

RN 51646-45-8 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 7-(4-morpholinyl)-2-[(phenylmethyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 91 OF 110 CAPLUS COPYRIGHT 2003 ACS

1974:27191 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

80:27191

TITLE:

New condensed pyrimidinium salts with a nitrogen

bridge atom

AUTHOR (S):

Chuiguk, V. A.; Fedotov, K. V.; Boiko, Yu. P.;

Bachkovskii, I. P.; Golubushina, G. M.; Mostovaya, O.

CORPORATE SOURCE:

Kiev. Gos. Univ. im. Shevchenko, Kiev, USSR

SOURCE:

Khimiya Geterotsiklicheskikh Soedinenii (1973), (10),

1432-3

CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE:

Journal Russian

LANGUAGE:

For diagram(s), see printed CA Issue.

Oxadiazolo-pyrimidinium (I) was obtained in 88% yield by heating AB 2-amino-5-phenyl-1,3,4-oxadiazolium perchlorate 2 hr with MeCOCHEtCOMe at 140-50.degree.. Boiling I with PhNH2 in AcOH yielded quant. triazolo deriv. (II). Tetrazole deriv. (III) was prepd. in 96% yield by heating 5-amino-1-methyltetrazolium perchlorate 1 hr with MeCOCH2COMe at

140-50.degree.. Treatment of 5-amino-2-benzyltetrazole with MeCCl:CMeCHO

in MeOH contq. HClO4 gave 38% tetrazole deriv. (IV).

IT 50735-21-2P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

50735-21-2 CAPLUS RN

[1,2,4]Triazolo[1,5-a]pyrimidinium, 6-ethyl-5,7-dimethyl-2,3-diphenyl-, perchlorate (9CI) (CA INDEX NAME)

CM

CRN 50735-20-1 CMF C21 H21 N4

CM 2

CRN 14797-73-0 CMF Cl O4

L3

# 09/ 895,975

ACCESSION NUMBER:

1972:3793 CAPLUS

DOCUMENT NUMBER:

76:3793

TITLE:

Pharmaceutical-chemical research on

s-triazolo[1,5-a]pyrimidines

AUTHOR (S):

Tenor, E.; Ludwig, R.

CORPORATE SOURCE:

Forschungslab., VEB Dtsch. Hydrierwerk Rodleben,

Rodleben, Fed. Rep. Ger.

SOURCE:

Pharmazie (1971), 26(9), 534-9 CODEN: PHARAT; ISSN: 0031-7144

DOCUMENT TYPE:

Journal

LANGUAGE:

German

GI

For diagram(s), see printed CA Issue.

Amino- or alkoxy-substituted s-triazolopyrimidines, including the coronary AB vasodilator trapymin (Rocornal) (I, R = Me) were prepd. For example, 0.05 mole 7-chloro-s-triazolo[1,5-a]pyrimidine in 50-75 ml H2O was treated with 0.1 mole Et2NH at 30-40.degree. and kept at 30-40.degree. for 1 hr. The mixt. was then refluxed for 1 hr to give a 43 yield of I (R = H).

Similarly prepd. were 41 other s-triazolo[1,5-a]pyrimidines.

IT 34453-30-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

34453-30-0 CAPLUS RN

[1,2,4]Triazolo[1,5-a]pyrimidine, 2,6-diethyl-5,7-di-1-piperidinyl-, CN monohydrochloride (9CI) (CA INDEX NAME)

# HCl

ANSWER 93 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1970:477192 CAPLUS

DOCUMENT NUMBER: 73:77192

TITLE: Synthesis of s-triazolo[a]pyrimidopyrimidines

AUTHOR(S): Muehlstaedt, Manfred; Krausmann, H.; Fischer, Gerhard CORPORATE SOURCE: Sekt. Chem., Karl-Marx-Univ., Leipzig, Fed. Rep. Ger.

Journal fuer Praktische Chemie (Leipzig) (1970), SOURCE:

312(2), 254-62

CODEN: JPCEAO; ISSN: 0021-8383

DOCUMENT TYPE: Journal LANGUAGE: German

For diagram(s), see printed CA Issue.

2-Hydrazino-5-hydroxypyrimido[4,5-d]pyrimidine (I), from

2-ethylthio-5-hydroxypyrimido[4,5-d]pyrimidine and N2H4, cyclized with

AcoCH(OEt)2 to an inseparable mixt. of 6-hydroxy-s-triazolo[4,3a]pyrimido[4,5-e]pyrimidine (II) and 6-hydroxy-s-triazolo[4,3-

a]pyrimido[4,5-d]pyrimidine (III). Similarly, treatment of I with HCO2H

gave 6-hydroxy-s-triazolo[1,5-a]pyrimido[4,5-d]pyrimidine (IV) and

6-hydroxy-s-triazolo[1,5-a]pyrimido[4,5-e]pyrimidine (V). II and III were the 1st products of this reaction also and underwent Dimroth rearrangement

to IV and V. IV was also prepd. by condensing 3-amino-1,2,4-triazole with EtOCH:C(CN)2 followed by hydrolysis and treatment with HCONH2. Concd. H2SO4 hydrolysis of 7-amino-6-cyano-s-triazolo[1,5-a]pyrimidine gave 6-carboxamido-7-amino-s-triazolo[4,3-a]pyrimidine.

IT 28524-63-2P

RN 28524-63-2 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxamide, 7-amino- (6CI, 8CI) (CA INDEX NAME)

L3 ANSWER 94 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1970:425482 CAPLUS

DOCUMENT NUMBER: 73:25482

TITLE: Triazolo[1,5-a]pyrimidines

INVENTOR(S):
Dukes, Michael

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.

SOURCE: Ger. Offen., 75 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT NO.	KIND	DATE	AP	PLICATION NO.	DATE
DE	1946315	Α	19700319	DE	1969-1946315	19690912
DE	1946315	C2	19850515			
GB	1234635	Α	19710609	GB	1968-43627	19680913
ZA	6905832	Α	19710331	$z_{\mathbf{A}}$	1969-5832	19690814
US	3689488	Α	19720905	US	1969-850221	19690814
PL	80261	P	19750830	PL	1969-135379	19690815
PL	80539	P	19750830	$_{ m PL}$	1969-139471	19690815
$_{ m PL}$	80662	P	19750830	PL	1969-139525	19690815
$\mathtt{PL}$	80664	P	19750830	$\mathtt{PL}$	1969-139527	19690815
DK	137498	C	19780828	DK	1969-4586	19690827
BR	6912007	A0	19730419	BR	1969-212007	19690829
SU	404249	D	19731026	SU	1969-1447192	19690902
SU	432719	D	19740615	SU	1969-1445877	19690902
SU	485597	D	19750925	SU	1969-1447118	19690902
SU	511001	D	19760415	SU	1969-1365596	19690902
CS	163196	P	19750829	CS	1969-6023	19690903
CS	163197	P	19750829	CS	1969-2756	19690903
BE	738830	Α	19700312	BE	1969-738830	19690912
NL	6913907	Α	19700317	NL	1969-13907	19690912
NL	162651	В	19800115			
NL	162651	C	19800616			
FR	2018077	A5	19700529	FR	1969-31200	19690912
FR	2018077	B1	19730112			
AΤ	292000	В	19710810	AT	1969-8717	19690912
AΤ	292697	В	19710910	AT	1970-8668	19690912
ΑT	292696	В	19710910	AT	1970-8667	19690912

AT 292699	В	19710910	AT 19	70-8670	19690912
SE 373584	В	19750210	SE 19	69-12601	19690912
SE 377460	В	19750707	SE 19	72-16479	19690912
JP 51007677	B4	19760310	JP 19	969-72676	19690912
ES 371509	A1	19711101	ES 19	69-371509	19690913
CH 522666	A	19720515	CH 19	69-522666	19690915
CH 523270	Α	19720531	CH 19	69-523270	19690915
CH 523272	Α	19720531	CH 19	69-523272	19690915
CH 529772	Α	19721031	CH 19	69-529772	19690915
CH 530410	Α	19721115	CH 19	69-530410	19690915
US 3773949	A	19731120	US 19	72-252727	19720512
PRIORITY APPLN. INFO.:			GB 1968-	43627	19680913
			GB 1969-	22266	19690501
			US 1969-	850221	19690814
			SU 1969-	1365596	19690902
/ /		' ' ' ' ' ' ' ' ' ' ' '			

For diagram(s), see printed CA Issue. GI

The title compds. (I and II), which are effective as antispastics, for the AB redn. of body fat, and as antiallergic agents, are prepd. by treating a substituted triazole with an unsatd. ester or with a .beta.-oxo acid ester. Thus, 45.4 g N-propyl-S-ethylisothiourea-HBr in 100 ml water and 8 g NaOH was treated with 30 g PhCH2NCS in 100 ml EtOH to obtain 1-benzyl-4-ethyl-5-propyl-4-isothiobiuret, which was treated with EtI in EtOH to obtain 1-benzyl-2,4-diethyl-5-propyl-2,4-diisodithiobiuret, which was refluxed with hydrazine hydrate in EtOH to obtain 3-(benzylamino)-5-(propylamino)-1,2,4-triazole (III), m. 164.degree.. III (12.5 g), 7.5 g Me .beta.-methoxy-.alpha.-methylacrylate (IV) in 30 ml EtOH contg. 2.75 g 50% NaH dispersion was refluxed 48 hr to give a mixt. of 65% 2-(benzylamino)-6-methyl-5-oxo-4-propyl-4,5-dihydro-s-triazolo[1,5a]pyrimidine and 35% 4-benzyl-6-methyl-5-oxo-2-(propylamino)-4,5-dihydrotriazolo[1,5-a]pyrimidine, m. 82-4.degree.. This mixt. was treated in acidified EtOH with H over 5% Pd/C to obtain I (R = PrNH, R1 = benzyl, R2 = Me), m. 102-4.degree. and on further chromatog. I (R = NH2, R1 = Pr, R2 = Me), m. 158.degree. (decompn.). About 40 examples are characterized.

IT 3043-84-3P

CN

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 3043-84-3 CAPLUS

> s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 2-amino-4,5-dihydro-7methyl-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \text{Me} \\ \hline \\ EtO-C & N & NH_2 \\ \hline \\ O & N & NH \end{array}$$

ANSWER 95 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1970:79087 CAPLUS

DOCUMENT NUMBER: 72:79087

TITLE:

s-Triazolo[1,5-.alpha.]pyrimidines PATENT ASSIGNEE(S): VEB Deutsches Hydrierwerk Rodleben

SOURCE: Fr., 8 pp. CODEN: FRXXAK

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

GI For diagram(s), see printed CA Issue.

The title compds. (I) and their salts were prepd. Thus, 9.4 g I (R1 = R3 = Cl, R2 = R4 = H) in 100 ml H2O wasslowly added to 7.5 Et2NH, stirred 2 hr at ambient temp. and 2 hr at 70-80.degree. to give 10 g I (R1 = Cl, R3 = Et2N, R2 = R4 = H) (II) m. 110-11.degree.. To 5.7 g II in 50 ml BuOH was added 6 g PhCH2NH2 and the mixt. refluxed 5 hr to give 6 g I (R1 = PhCH2NH, R3 = Et2N, R2 = R4 = H), m. 146-7.degree.. By similar methods the following I were prepd. (R1, R3, R2, R4, and m.p. given): Cl, PhCH2NH, H, H, 178-9.degree.; Et2N, PhCH2NH, H, H, 125-6.degree.; bis(.beta.-hydroxyethyl)amino, furfurylamino, H, H, 107.degree.; Cl, PhEtN, H, H, 145-6.degree.; piperidino, piperidino, H, T9.degree. (monohydrate); Cl, Et2N, H, Et, 79-80.degree.; piperidino, piperidino, H, Et, 69.degree.; piperidino, piperidino, Et, Et, 165.degree.

IT 27232-21-9P

RN 27232-21-9 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine, 2,6-diethyl-5,7-dipiperidino- (8CI) (CA INDEX NAME)

ANSWER 96 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1969:47491 CAPLUS

DOCUMENT NUMBER: 70:47491

TITLE: 5- and 7-(basically substituted)-s-Triazolo[1,5-

a]pyrimidine coronary dilators Tenor, Ernst; Fueller, Heinz

INVENTOR(S): Tenor, Ernst; Fuel SOURCE: Ger. (East), 3 pp.

CODEN: GEXXA8

DOCUMENT TYPE: CODEN: GEXX

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

FAMILI ACC. NOM. COUNT: .

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
DD 61269 19680420 DD 19670701

GI For diagram(s), see printed CA Issue.

The title compds. (I) were prepd. Thus, 7.5 g. Et2NH was added slowly to 9.4 g. 5,7-dichloro-s-triazolo[1,5-a]pyrimidine in 100 ml. H2O, the mixt. stirred 2 hrs. at room temp. and 2 hrs. at 70-80.degree., the cold soln. acidified and filtered to give 10 g. I (R2 = R4 = H) (II, R1 = Cl, R3 = Et2N) (III), m. 111-12.degree.. III (5.7 g.) was dissolved in 50 ml. BuOH, 6 g. PhCH2NH2 added, the mixt. refluxed 5 hrs. resulting in 6 g. II (R1 = PhNH, R1 = Et2N), m. 146-7.degree. (AcOEt). Similarly prepd. were the following II (R1, R3, and m.p. given): Cl, PhCH2NH, 178-9.degree. (EtOH); Et2N, PhCH2NH, 125-6.degree. (AcOEt); (HOCH2CH2)2N, furfurylamino,

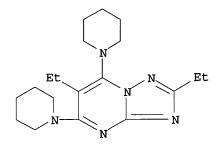
#### 09/ 895,975

107.degree. (H2O); Cl, PhCH2CH2NH, 145-6.degree. (EtOH); Et2N, Et2N, - (b0.2 165-70.degree.); piperidino (A), A, (monohydrate) 79.degree. (H2O-EtOH); and I (R2 = H, R4 = Et); Cl, Et2N, 79-80.degree. (C6H6); A, A, 69.degree. (C6H6); and R2 = R4 = Et, R1 = R3 = A, hydrochloride, m. 165.degree.. The compds. have coronary dilatory properties.

IT 21841-19-0P

RN 21841-19-0 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine, 2,6-diethyl-5,7-dipiperidino-, hydrochloride (8CI) (CA INDEX NAME)



### •x HCl

L3 ANSWER 97 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1969:4033 CAPLUS

DOCUMENT NUMBER: 70:4033

TITLE: Position of protonation and of N-methylation in the

s-triazolo[1,5-a]pyrimidine ring system

AUTHOR(S): Paudler, William W.; Helmick, Larry S.

CORPORATE SOURCE: Ohio Univ., Athens, OH, USA

SOURCE: Journal of Heterocyclic Chemistry (1968), 5(5), 691-3

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The N-methylation in the title ring system occurred on N3, as shown by the hydrolysis of s-triazolo[1,5-a]pyrimidine methiodide to

3-amino-4-methyl-s-triazole (I). N-Methylation of the

imidazo[1,2-a]pyrimidine ring occurred on N2. The position of protonation in the s-triazolo[1,5-a]pyrimidine system was similar to that of

N-methylation. 1H N.M.R. spectra are given.

IT 20865-07-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 20865-07-0 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine, 5,6,7-trimethyl- (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 98 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:84573 CAPLUS

DOCUMENT NUMBER: 64:84573
ORIGINAL REFERENCE NO.: 64:15878b-e

TITLE: Condensed heterocycles. VIII. Condensation of

3-amino-1,2,4-triazole with cyanoacetic ester Levin, Ya. A.; Platonava, N. R.; Kukhtin, V. A.

AUTHOR(S): Levin, Ya. A.; Platonava CORPORATE SOURCE: Inst. Org. Chem., Kazan

SOURCE: Izv. Akad. Nauk SSSR, Ser. Khim. (1964), (8), 1475-80

DOCUMENT TYPE: Journal LANGUAGE: Russian

The reaction of 3-amino-1,2,4-triazole (I) with AB cf. CA 60, 13242g. NCCH2CO2Et was investigated and the structure of the products examined. Na (5.75 g.) and 21 g. I were dissolved in 500 ml. abs. alc., 28.25 g. NCCH2CO2Et was added, and the mixt. boiled for 2.5 hrs. to give 73% 4-amino-6-oxo-1,2,4-triazolo [2,3-a] pyrimidine (II), decompd. 330.degree.. I (2.1 g.) was treated with 2.83 g. NCCH2CO2Et at 180.degree. 15 min. to give 29% II. II (23 g.) was boiled 5 hrs. with 150 ml. Ac20 and 200 ml. pyridine to give 75% 4-acetylamino-6-oxo-1,2,4triazolo[2,3-a]pyrimidine (III), decompd. >320.degree.. III (1.2 g.) and 5.5 g. MgO was boiled 12 hrs. in 150 ml. water to give 0.41 g. I. (4.2 q.) was boiled 1.5 hrs. in 60 ml. POCl3 to give 37% 4-acetylamino-6-chloro-1,2,4-triazolo[2,3-a]pyrimidine (IV), decompd. >300.degree.. IV (0.5 g.) and 2 g. MgO was boiled 3 hrs. in 50 ml. water to give 75% 4-amino-6-chloro-1,2,4-triazolo[2,3-a]pyrimidine (V), m. 20.degree.. V (0.4 g.) was hydrolyzed in 30 ml. 5% NaOH for 3.5 hrs., to give II. V (0.2 g.) and 0.11 g. 20% Pd-C were mixed and hydrogenated 3 hrs. to give 4-amino-1,2,4-triazolo[2,3-a] pyrimidine (VI), m 277.8.degree.. Na (4.6 g.) was dissolved in 400 ml. abs. alc. 28.6 g. 2-amino-4-oxo-6-thioxopyrimidine (VII) and 21.8 g. EtBr were added, and the mixt. was boiled 4 hrs. to give 54% 3-ethylthio-4-oxo-6aminopyrimidine (VIII), m. 216-18.degree.. VIII (7.5 g), 15.5 ml. N2H4 hydrate, and 30 ml. alc. were boiled for 4 hrs. to give 45% 2-hydrazino-4-oxo-6-aminopyrimidine (IX), m. 253-5.degree... IX (9.3 q.) was boiled 30 hrs. in 150 ml. HCONMe2 to give 8.7 g. 4(6)-amino-6(4)-oxo-1,2,4-triazolo[4,3-a]pyrimidine, m. >330.degree.. Uv spectra are given for all synthesized compds.

IT 5909-11-5, s-Triazolo[1,5-a]pyrimidin-5(4H)-one, 7-amino-6-methyl-(prepn. of)

RN 5909-11-5 CAPLUS

CN s-Triazolo[1,5-a]pyrimidin-5(4H)-one, 7-amino-6-methyl- (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 99 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1966:44428 CAPLUS

DOCUMENT NUMBER:

64:44428

ORIGINAL REFERENCE NO.:

64:8361h,8362a-c

TITLE:

6-0xo-1,3,3a,7-tetraazaindenes for photographic

emulsions

INVENTOR(S):

Williams, Leslie A.

PATENT ASSIGNEE(S): Eastman Kodak Co.

SOURCE: 6 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
----US 3202512 19650824 US 19610131

GI For diagram(s), see printed CA Issue.

Compds. of the general formula I are prepd. and can be used to prevent the formation of fog during the storage of emulsions. Thus, a mixt. 324 g. MeC(OEt)3, 320 g. CH2(CO2Et)2, and 5.6 g. KOH is heated .apprx.4 hrs. at .apprx.205.degree.C. to give 180 g. MeC(OEt):C(CO2Et)2 (II), m. 25-7.degree.C. II(46.0 g.) and 16.8 g. 3-amino-1,2,4-triazole are added to a soln. of 4.6 g. Na in 120 cc. alc. and the mixt. is refluxed 6 hrs. to give 26 g. I (R = Me, R' = CO2Et, X = H) (III), m. 208.degree.C. (H2O). Similarly prepd. are the following I (X, R, R1, and m.p. given): MeS, Me, CO2Et, 214.degree.C. (50% HOAC); NH2, Me, CO2Et, >300.degree.C. (H2O); MeS, H, CO2Et, 209-10.degree.C. (H2O). III (26 g.) in 150 cc. 10% NaOH is refluxed 1 hr. to give 21 g. I (X = H, R = Me, R' = CO2H) (IV), m. 228-9.degree.C. (H2O). Similarly prepd. are I (X = MeS, R = Me, R' = CO2H), m. 236.degree.C. (H2O) and I (X = NH2, R = Me, R' = CO2H), m. 360.degree.C. IV (5 g.) is heated in vacuo at 280.degree.C. to give 3 g. I ((X = R' = H, R = Me), m. 266-7.degree.C. (H2O). Similarly prepd. are I (R1 = H, X = MeS, R = Me), m. 280-1.degree.C. (H2O) and I (R1 = H, X = NH2, R = Me), m. 357.degree.C. (H2O). A high-speed Ag bromoiodide emulsion contg. 1.6 g. IV/mole Ag is incubated 2 weeks at 120.degree.F., exposed, and processed to give relative speed 65, .gamma. 1.15, fog 0.14 as compared with 37, 0.67, and 0.61, resp., for the control.

RN 3043-82-1 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylthio)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 100 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1965:454706 CAPLUS

DOCUMENT NUMBER: 63:54706

ORIGINAL REFERENCE NO.: 63:9961h,9962a-c

TITLE: New tetrazaindene stabilizers

INVENTOR(S): Williams, Leslie A.

PATENT ASSIGNEE(S): Kodak Ltd.
SOURCE: 5 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GB 999381 19650728 GB 19601111

US 3271401 1966 US

AB Compds. of general formula I are made by condensing II and R3(R40)C:C(CO2R4)2 (III) wherein R1 is H, alkyl, thiol, alkylthio, amino, alkylamino, morpholino, or piperidino, R2 is alkoxycarbonyl, R3 is H or alkyl, and R4 is alkyl. Both I and its 5-carboxy deriv. (made by heating I with an aq. alk. soln. of an alkali metal or NH4 salt, followed by acidification with a mineral acid) stabilize photographic emulsions against changes in speed and fog produced by storage. The compds. should be added at the rate of 0.02-2 g. mole AgX to achieve the best results. Thus, 5-ethoxycarbonyl-4-methyl-6-oxo-1,3,3a,7-tetrazaindene was prepd. by dissolving 4.6 g. Na in 120 ml. EtOH and adding to this soln. 16.8 g. 3-amino-1,2,4-triazole and 46 g. diethyl .alpha.-ethoxyethylidenemalonate and then refluxing 6 hrs. The soln. was chilled and acidified with HCl to ppt. the desired product. After recrystn. from H2O, 26 g. product was obtained, m. 208.degree. Photographic tests of the compd. in AgBr and AgI emulsions showed improvements in speed and fog on initial testing and after 7 days dry incubation.

RN 3043-82-1 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylthio)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 101 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1964:417673 CAPLUS

DOCUMENT NUMBER: 61:17673

ORIGINAL REFERENCE NO.: 61:2941g-h,2942a

TITLE: Azaindolizine compounds. XVIII. Proton magnetic

resonance spectra of s-triazolo-[1,5-a]pyrimidine and

its derivatives

AUTHOR(S): Makisumi, Yasuo; Watanabe, Haruyuki; Tori, Kazuo

CORPORATE SOURCE: Shionogi Co. Ltd., Osaka, Japan

SOURCE: Chem. Pharm. Bull. (Tokyo) (1964), 12(2), 204-12

DOCUMENT TYPE: Journal LANGUAGE: Unavailable GI For diagram(s), see printed CA Issue.

cf. CA 60, 5484g. Proton magnetic resonance spectra of 21 s-triazolo[1,5-a]pyrimidine derivs. were detd. The Me substituent effect on the proton chem. shifts and the correlation between the proton chem. shift and the local .pi.-electron density of the C atom to which the proton is bonded are discussed. The charge densities detd. from proton chem. shifts show a good correspondence with the charge distributions calcd. by the simple Hueckel mol. orbital method. Di-Et methylmalonate (17.4 g.) and 8.4 g. 5-amino-s-thiazole added to a soln. of 2.3 g. Na in 75 ml. abs. EtOH, and the stirred soln. refluxed 8 hrs. gave 5.9 g. 6-methyl-s-triazolo[1,5-a]pyrimidine-5,7-diol (I), decompd. 279.degree. (60% EtOH). I (5 g.) heated 4 hrs. with 30 ml. POCl3 at 100.degree. gave 5.35 g. 6-methyl-5,7-dichloro-s-triazolo[1,5-a]pyrimidine (II), m. 150-50.5.degree. (C6H6-ligroine). II (5 g.) in 200 ml. abs. EtOH

L3 ANSWER 102 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1964:3162 CAPLUS

DOCUMENT NUMBER: 60:3162
ORIGINAL REFERENCE NO.: 60:523e-g

TITLE: Condensed heterocycles. IV. Condensation of

3-amino-1,2,4-triazoles with diaceto- and

dipropionitriles

AUTHOR(S): Levin, Ya. A.; Kukhtin, V. A. CORPORATE SOURCE: Cine-Photo Res. Inst., Kazan

SOURCE: Zh. Obshch. Khim. (1963), 33(8), 2678-82

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

Heating 3-amino-5-substituted 1,2,4-triazoles with substituted AB .beta.-aminoacrylonitriles 30-40 min at 155-200.degree. gave (Ia) (R, R', R'' % yield, and m.p. shown, resp.): H Me, H (I), 84, 246-7.degree.
(picrate decompd. 212-14.degree.); Pr, Me, H, 61, 180-1.degree.; C6H13, Me, H, 56, 128-30.degree.; H, Et, Me (II), 72, 262-3.degree.; Pr, Et, Me, 51, 225-6.degree.. I refluxed with Ac2O in C5H5N gave the Ac deriv., m. 230.degree.; similarly was prepd. Ac deriv. of II, m. 1402.degree., purified on Al2O3 in C6H6. I and tosyl chloride gave 75% ptoluenesulfonamido analog, decompd. 283-5.degree. (.lambda. 304 m.mu.). Treated with Br vapors at 60.degree. in H2O, I gave 88% 4-imino-5bromo-6-methyt-1,2,4-triazolo[2,3-a]pyrimidine, decompd. 2457.degree. (.lambda. 261 and 298 m.mu.). I and aq. I-KI in the presence of K2CO3 at 70-80.degree. gave 4-amino-6-methyl-5-iodo-1,2,4-triazolo[2,3a]pyrimidine, decompd. 233-5.degree. (.lambda. 260 and 300 m.mu.). 4-Chloro-5-hexyl-6-methyl-1,2,4-triazolo[2,3-a]pyrimidine, m. 412.degree., formed in 82% yield from the 4-oxo analog by refluxing in POCl3 3 hrs. Treated with NH3 in EtOH at 0.degree., then heated 3 hrs. in an ampul at 100.degree., this gave 83% 4-amino-5-hexyl-6methyl-1,2,4-triazolo[2,3a]pyrimidine, m. 230-1.degree., which could not be prepd. by the above condensation of aminotriazole with dipropionitrile even at 230.degree.. and concd. HCl in 5 hrs. at 140.degree. in a sealed tube gave 3-amino-1,2,4-triazole, isolated as the picrate, decompd. 228-30.degree.. Ultraviolet spectra of Ia are shown.

RN 90085-15-7 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine, 7-amino-5-ethyl-6-methyl- (7CI) (CA INDEX NAME)

L3 ANSWER 103 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1963:415673 CAPLUS

DOCUMENT NUMBER: 59:15673
ORIGINAL REFERENCE NO.: 59:2834c-q

TITLE: Mercapto tetrazaindenes in photographic silver halide

emulsions

INVENTOR(S):
Knott, Edward B.

PATENT ASSIGNEE(S): Kodak Ltd.
SOURCE: 23 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

GB 893428 19620411 GB 19570409

For diagram(s), see printed CA Issue. GΙ Prepns. are given for substituted 1,3,3a,7-tetrazaindene-4-thiols (I) and AΒ 1,2,3a,4-tetrazaindene-7-thiols (II), in which R1 is alkyl, aryl or aralkyl, R2 is R1, H, or alkylthio, R3 is H or halogen and R4 is H or alkyl. Incorporated into a photographic emulsion in concns. of 0.03-0.15 g./mole AgX I and II act as antiplumming agents; prints and transparencies processed in a non-coupling developer soln. show increased reflection density and (or) contrast. 4-Hydroxy-6-methyl-1,3,3a,7-tetrazaindene (III) (34 g.), 35 ml. PhNMe2, and 100 ml. POCl3 heated at 125.degree. 1 hr. followed by concn. and treatment with ice water gives a 73% yield of its 4-Cl analog (IV), m. 151.degree.. IV (3.75 g.) and 1.7 g. thiourea refluxed in 20 ml. MeOH 3 min. gives 86.5% I (R1 = Me, R2 = R4 = H, R3 = SH), yellow, m. 278-9.degree. (decompn.). The 6-Ph analog (V) of III converted to its 4-Cl deriv., m. 282.degree., similarly gives I (R1 = Ph, R2 = R4 = H, R3 = SH), yellow, m.282.degree.. V brominated in HOAc gives its 5-Br deriv., m. 269.degree., which is converted as above to I (R1 = Me, R2 = H, R3 = SH, R4 = Br), yellow, m. 215.degree.. 3-Amino-5-methyl-1,2,4-triazole (47 g.) and 65.7 g. Et acetoacetate refluxed in 200 ml. HOAc 3 hrs. gives the 2-methyl deriv. of III, m. 307.degree. which is converted to its 4-Cl analog, m. 148.degree. and then to I (R1 = R2 = Me, R3 = SH, R4 = H), yellow, m. 286.degree. (decompn.). The 2-methylthio deriv. of III converted to its 4-Cl deriv., m. 113-16.degree., gives I (R1 = Me, R2 = SMe, R3 = SH, R4 = H), yellow, m. 265.degree.. 3-Amino-1,2,4-triazole (VI) (50 g.), 100 g. Et .alpha.-ethylacetoacetate in 250 ml. HOAc gives the 5-ethyl deriv. (VII) of III, m. 275.degree. which is converted to its 4-Cl analog, m. 132.degree., and then to I (R1 = Me, R2 = H, R3 = SH, R4 = Et), yellow, m. 270-3.degree.. VI and Et .alpha.-isobutylacetoacetate gives the 5-iso-Bu analog of VII, m. 258.degree. which is converted to I (R1 = Me, R2 = H, R3 = SH, R4 = iso-Bu), m. 270.degree. (decompn.). Et benzoylacetate (96 g.) fused with 42 g. 1-amino-1,3,4-triazine (VIII) at 175.degree. 1 hr. and poured into EtOH gives 21 g. 5-phenyl-7-hydroxy-1,2,3a,4-tetrazaindene (IX), m. 284-5.degree. which is converted to its 7-Cl deriv., m. 214.degree. and then to II (R1 = Ph, R2 = H, R3 = SH), m. 173.degree. by

means of alk. H2S. VIII and Et .alpha.-ethylacetoacetate gives the 6-ethyl-5-methyl analog of IX which is converted to its 7-Cl deriv., m. 112.degree., and then to II (R1 = Me, R2 = Et, R3 = SH), m.238.degree.

89981-48-6, s-Triazolo[1,5-a]pyrimidine, 5-chloro-6-ethyl-7-methyl-IT (prepn. of)

89981-48-6 CAPLUS RN

s-Triazolo[1,5-a]pyrimidine, 5-chloro-6-ethyl-7-methyl- (7CI) (CA INDEX CN

ANSWER 104 OF 110 CAPLUS COPYRIGHT 2003 ACS L3

ACCESSION NUMBER:

1963:53282 CAPLUS

DOCUMENT NUMBER:

58:53282

ORIGINAL REFERENCE NO.: 58:9077b-h

TITLE:

The structure of certain polyazaindenes. X. The

reaction of ethyl .alpha.-cyano(and

.alpha.-ethoxycarbonyl)-.beta.-ethoxyacrylate and -.beta.-ethoxycrotonate with some .alpha.-amino azoles

Williams, L. A.

AUTHOR(S): CORPORATE SOURCE:

Kodak Ltd., Harrow, UK

SOURCE:

J. Chem. Soc. (1962) 2222-8

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

GΙ

For diagram(s), see printed CA Issue. cf. CA 57, 16613g. A series of new heterocyclic compds. was prepd. by the AΒ reaction of EtOCH:C(CN)CO2Et (I), EtOCH:C(CO2Et)2 (II), and EtOCMe:C(CN)CO2Et (III) with derivs. of 3-amino-1,2,4-triazole (IV) and 2-aminoimidazoline (V). Va [R = CH:C(CO2Et)2, R1 = H] (VI), m. 180-1.degree., was prepd. in 11.5% yield by the method of Heimbach and Kelly (U.S. 2,449,225, CA 43, 52i). Va [R = CH(OEt)CH(CO2Et)2, R1 = MeS](VII), m. 108-9.degree. (aq. EtOH), was prepd. by the same method from 13 g. 5-MeS deriv. (VIII) of IV. VI (1 g.) refluxed 2.5 hrs. in 10 cc. AcOH yielded 0.4 g. VIIIa (R = R1 = H, R2 = CO2Et) (IX), m. 252-4.degree. (H2O). VII (1 g.) gave similarly 0.2 g. VIIIa (R = SMe, R1 = H, R2 = H)CO2Et) (X), m. 309-10.degree. (AcOH). VIII (13 g.) and 21.6 g. II refluxed overnight with 2.3 g. Na in 60 cc. EtOH, the mixt. dild. with 400 cc. H2O, boiled, acidified hot with HCl, and cooled gave X; the filtrate cooled several hrs. yielded 2 g. Et 6,7-dihydro-2-methylthio-6-oxo-1,3,3a,7-tetraazaindene-5-carboxylate, m. 209-10.degree. (H2O). I (8.4 g.) and 4.2 g. IV heated as 125-8.degree. yielded 10 g. Va (R = CH:C(CN)CO2Et, R1 = H) (XI), m. 202-4.degree. (70% aq. AcOH). I (4.2 g.) and 3.25 g. VIII yielded similarly 1.0 g. 5-MeS deriv. (XII) of XI, m. 184-6.degree. (50% aq. AcOH). I (4.2 g.) and 2.1 g. IV refluxed 3 hrs. in 50 cc. AcOH yielded 1.8 g. XIIa (R = H) (XIII), m. 224-5.degree. (H2O). XI refluxed in AcOH (10 cc./g.) 45 min. also gave XIII. I (4.2 g.) and 3.25 g. VIII in 30 cc. AcOH refluxed 3 hrs., the mixt. cooled, dild. with 30 cc. Et2O, and filtered yielded 3.9 g. XIIa (R = MeS) (XIV), m. 214-16.degree. (aq. AcOH). XII (0.5 g.) refluxed 45 min. in 5 cc. AcOH yielded 0.25 g. XIV. IV (8.4 g.) and 16.9 g. I refluxed with 2.3 g. Na in 60 cc. EtOH to soln., the soln. dild. with 100 cc. H2O, warmed on the steam bath to soln., acidified, and cooled, and the ppt. repptd. from aq. Na2CO3 with CO2 yielded 2 g. VIIIa (R = R1 = H, R2 = CN) (XV), m. 305-7.degree. (H2O); the filtrate acidified with HCl yielded an addnl. 1.5 g. XV. VIII (6.5 g.), 8.45 g. I, and 1.15 g. Na in 60 cc. EtOH refluxed 1.5 hrs., the mixt. dild. with 60 cc. H2O, acidified with HCl, and filtered gave 4 g. mixt. which heated with 8 g. Na2CO3 in 60 cc. H2O at

IT

50-60.degree., and filtered yielded 2.1 g. XIV; the filtrate cooled, filtered, and acidified with HCl yielded 1.7 g. VIIIa (R = SMe, R1 = H, R2 = CN), m. 318-20.degree. (50% AcOH). XI (2.5 g.) in 25 cc. 12% ag. NaOH heated 3 min. on the steam bath, the mixt. cooled, and acidified with dil. HCl gave 0.40 g. free acid of XIII, m. 292-3.degree. (75% AcOH). XI (2.9 g.) refluxed 2 hrs. with 0.32 g. Na in 20 cc. EtOH, the mixt. dild. with H2O, kept 1.5-2 hrs. at room temp., and filtered yielded 1.3 g. XIII; the filtrate acidified and evapd. gave 0.3 g. XV. III (18.3 g.) and 8.4 g. IV in 60 cc. AcOH refluxed 6 hrs. and cooled yielded 10 g. IV salt, m. 275-7.degree. (H2O), of VIIIa. (R = H, R1 = Me, R2 = CN) (XVI); the salt in H2O acidified yielded XVI, m. 301-2.degree.. VIII (13.0 g.) and 18.3 g. III gave similarly 4.5 g. 2-MeS deriv. of XVI, m. 300.degree. (decompn.) (H2O). I(8 g.) and 4 g. V carbonate heated at 130.degree. and cooled gave 2.0 g. 5-cyano-1,2,4,7-tetrahydro-4-oxo-1,3a,7-triazaindene (XVII), m. 297.degree. (H2O). III (4.3 g.) and 2 g. V carbonate gave similarly 1.5 g. 6-Me deriv. of XVII, m. 336.degree. (aq. EtOH). 3043-84-3, s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 2-amino-4,5-dihydro-7-methyl-5-oxo-, ethyl ester

(prepn. of)
RN 3043-84-3 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 2-amino-4,5-dihydro-7-methyl-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 105 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1962:483258 CAPLUS

DOCUMENT NUMBER: 57:83258

ORIGINAL REFERENCE NO.: 57:16613g-i,16614a-b

TITLE: Certain heterocyclic derivatives of phenethylamine Bunineki, Stanislaw; Gora, Danuta; Moll, Maria;

Rylski, Leszek; Gogolimska, Barbara; Kurowska, Hanna;

Pindor, Elzbieta

CORPORATE SOURCE: Akad. Med., Warsaw

SOURCE: Acta Polon. Pharm. (1961), 18, 261-8

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

Phthalaldehydic acid (10 g.) with hydrazine sulfate gave 9.7 g. AB 1-phthalazinone (I), m. 183-4.degree.. I treated with POCl3 yielded 72.3% 1-chlorophthalazine (II), m. 109-11.degree.. II (3.5 g.) heated 4.5 hrs. on a water-bath with 14 g. PhCH2CH2NH2 (III), the excess III distd. (8 g.), the residue dissolved in 40 ml. EtOH, and the soln. treated with 130 ml. H2O yielded 4.7 g. yellow 1-phenethylaminophthalazine (IV), m. 151-2.degree.; the HCl salt m. 93-4.degree. and formed a stable sesquihydrate, m. 91-5.degree.. 1,4-Phthalazinedione (11.5 g.) (Drew and Hatt, CA 31, 21884) and 60 g. PCl5 gave 13.5 g. 1,4-dichlorophthalazine (V), m. 164.degree.. V (3 g.) heated 1 hr. at 120.degree. with exclusion of moisture with 3.6 g. III, the mixt. treated while cool with 30 ml. MeOH, and left several days at room temp. yielded 2 g. 1-phenethylamino-4-chlorophthalazine (VI), m. 192-4.degree. (MeOH); the yield was slightly lower when 2.17 g. V, 2.61 g. III, and 10 ml. MeOH was left at room temp. over 3 weeks without being previously heated. The HCl salt of VI m. 243-4.degree. and formed a stable hydrate, m. 185-9.degree.. V (3 g.), 3.6 g. III, and 25 ml. MeOH refluxed 2.5 hrs. yielded 1.78 g.

1-chloro-4-hydroxyphthalazine, m. 271-2.degree.. 4-Quinazolinone (10 g.) (prepd. from anthranilic acid and HCONH2 in 49% yield) refluxed 1 hr. with 20 g. PCl5 and 40 ml. POCl3, the excess POCl3 distd., and the residue extd. with C6H6 yielded 5.5 g. 4-chloroquinazoline (VII), m. 95-6.degree. (petr. ether). VII (4 g.) treated dropwise under cooling with 5.8 g. III, the mixt. heated until it became clear, treated with 22 ml. H2O, and the ppt. dissolved in 78 ml. EtOH and repptd. by adding 150 ml. H2O gave 4.2 g. 4-phenethylaminoquinazoline (VIII), m. 167-71.degree.; the HCl salt m. 183-6.degree. (sealed capillary) and formed a stable hydrate; the picrate m. 192-4.degree.. IV and VIII revealed spasmolytic activity similar to that of papaverine.

RN 90871-26-4 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylsulfonyl)-5-oxo-, ethyl ester (7CI) (CA INDEX NAME)

L3 ANSWER 106 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1962:483257 CAPLUS

DOCUMENT NUMBER: 57:83257 ORIGINAL REFERENCE NO.: 57:16613g

TITLE: The structure of certain polyazaindenes. XI. The

preparation of 2- and 3-alkylsulfonyl- and

-hydroxytetraazaindenes

AUTHOR(S): Williams, L. A.

CORPORATE SOURCE: Kodak Lab., Harrow, UK SOURCE: J. Chem. Soc. (1962) 3854-8

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB cf. ibid. 2222; CA 56, 10139e. 2- and 3-Alkylthiotetraazaindenes gives rise to sulfones on oxidn. with hydrogen peroxide in acetic acid. These sulfones are converted into the hydroxy or alkoxy derivs. by hot aq. sodium hydroxide or alc. sodium alkoxides.

RN 90871-26-4 CAPLUS

CN s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylsulfonyl)-5-oxo-, ethyl ester (7CI) (CA INDEX NAME)

ANSWER 107 OF 110 CAPLUS COPYRIGHT 2003 ACS  $L_3$ 

1962:483256 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 57:83256 ORIGINAL REFERENCE NO.: 57:16613e-g

Pyrimidines. X. Antibiotics. 2. Synthesis of TITLE:

bacimethrin, 2-methoxy analog of thiamine, and related

alkoxy-pyrimidines

Koppel, Henry C.; Springer, Robert H.; Robins, Roland AUTHOR (S):

K.; Cheng, C. C.

CORPORATE SOURCE: Midwest Res. Inst., Kansas City, MO J. Org. Chem. (1962), 27, 3614-17 SOURCE: CODEN: JOCEAH; ISSN: 0022-3263

Journal

DOCUMENT TYPE: Unavailable LANGUAGE:

cf. CA 57, 5914h, 11198b. The proposed structure for the antibiotic bacimethrin has been confirmed synthetically as 4-amino-5-hydroxymethyl-2methoxypyrimidine. The 2-methoxy analog of thiamine has been prepd. from the synthetic bacimethrin. Several reactions indicating the effect of a substituent group in the 5 position of a pyrimidine ring on the case of nucleophilic replacement of a 2-alkylsulfonyl group have been reported.

90871-26-4, s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, TT 4,5-dihydro-7-methyl-2-(methylsulfonyl)-5-oxo-, ethyl ester (prepn. of)

90871-26-4 CAPLUS RN

s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-CN(methylsulfonyl)-5-oxo-, ethyl ester (7CI) (CA INDEX NAME)

ANSWER 108 OF 110 CAPLUS COPYRIGHT 2003 ACS L3

1962:483245 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 57:83245 ORIGINAL REFERENCE NO.: 57:16607e-h

Synthesis of potential anticancer agents. VI. TITLE:

Reactivity of 6-bromo-s-triazolo[2,3-a]pyrimidines

Makisumi, Yasuo AUTHOR(S): Shionogi & Co., Osaka CORPORATE SOURCE:

Chem. Pharm. Bull. (Tokyo) (1961), 9, 814-17 SOURCE:

Journal DOCUMENT TYPE: LANGUAGE: Unavailable

The possible activation of the generally inactive Br at the 6-position of s-triazolo[2,3-a]pyrimidine (I) by adjacent groups capable of tautomerism was realized by refluxing 3-4 hrs. the 6,5,7-Br(HO)(H2N) deriv. (II) of I and the 6,5,7-Br(HO)2 deriv. (III) of I with piperidine (IV) and morpholine (V) at the b.ps. of IV and V, resp., to give the corresponding 6-piperidino (VI and VII) and 6-morpholino (VIII and IX) compds. (wt. II or III, wt. IV or V, yield and m.p. product given): 1 g. II, 2 g. IV, 0.8 g. VI, 259.5.degree. (decompn.); 0.5 g. II, 1 g. V, 0.4 g. VIII, 309.degree. (decompn.); 1 g. III, 2 g. IV, 0.9 g. VII, 320-1.degree. (decompn.); and 1.1 g. III, 2.2 g. V, 1 g. IX, 295.degree. (decompn.). III (0.6 g.) refluxed 30 min. in EtOH with 0.2 g. SC(NH2)2 yielded 0.47 g. corresponding 6-[HN:C(NH2)S] compd. (X), m. above 320.degree., and this (0.5 g.) heated 30 min. on a water bath with 5 cc. N NaOH, the filtrate from the hot mixt. pptd. with EtOH, and the resulting Na salt dissolved in H2O and acidified with HCl yielded 0.3 g. bis(5,7-dihydroxy-s-triazolo[2,3a]pyrimidin-6-yl) disulfide (XI), m. 234-5.degree. (decompn.), formed also (0.6 g.) by refluxing 1.1 g. III 3 hrs. on a water bath with 0.38 g. SC(NH2)2 in the presence of 1% NaOH. Polarography of XI confirmed the disulfide linkage. However, 0.6 g. II refluxed 5 hrs. with 0.2 g. SC-(NH2)2 in EtOH failed to give a compd. corresponding to X, but yielded free S and 0.23 g. known 5,7-HO(H2N) deriv. (XII) of I, m. above 320.degree., whereas in the presence of 10% NaOH the heated mixt. of 1.2 q. II with 0.4 q. SC(NH2)2 in H2O yielded 0.1 g. bis(5-hydroxy-7-amino-striazolo[2,3-a]pyrimidin-6-yl) sulfide, m. above 320.degree., together with 0.4 g. XII.

90563-43-2, s-Triazolo[1,5-a]pyrimidin-5-ol, 7-amino-6-morpholino-IT (prepn. of)

90563-43-2 CAPLUS RN

s-Triazolo[1,5-a]pyrimidin-5-ol, 7-amino-6-morpholino- (7CI) (CA INDEX CN

ANSWER 109 OF 110 CAPLUS COPYRIGHT 2003 ACS L3

1962:408954 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 57:8954

ORIGINAL REFERENCE NO.: 57:1791c-h

TITLE: Tetraazaindene derivatives as photographic stabilizers

INVENTOR(S): Anon. PATENT ASSIGNEE(S): Kodak Soc. DOCUMENT TYPE: Patent LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

BE 610096 19611130 BE

PRIORITY APPLN. INFO.: GB 19601111

Colorless 5-ethoxycarbonyl-4-methyl-6-oxo-1,3,3a,7-tetraazaindene (I), m. 208.degree. (H2O), was prepd. in 26-g. yield by refluxing for 6 hrs. a mixt. of 4.6 g.Na in 120 cc. EtOH, 16.8 g. 3-amino-1,2,4-triazole (Ia) and 46 g. di-Et .alpha.-ethoxyethylidenemalonate (Ib), dilg. with 120 cc. H2O before cooling and adding concd. HCl. The corresponding 5-carboxy deriv. (II), m. 228-9.degree. (H2O) with gas evolution, was prepd. in 21 g. yield by refluxing for 1 hr. 26 g. I in 150 cc. 10% aq. NaOH and adding concd. HCl after cooling. 4-Methvl-6-oxo-1,3,3a,7-tetraazaindene, colorless plates, m. 266-7.degree. (H2O), was obtained in 3 g. yield by sublimation of 5 g. II heated at 280.degree. in vacuo. 5-Ethoxycarbonyl-4 - methyl- 2 - methylthio - 6 - oxo - 1,3,3a,7- tetraazaindene (III), colorless needles, m. 214.degree. (50% AcOH), was prepd. by refluxing to complete solidification (11/2 hrs.) a mixt. of 2.3 g. Na in 60 cc. EtOH, 23 g. Ib, and 13 g. 3-amino-5-methylthio-1,2,4-triazole. The corresponding 5-carboxy deriv., m. 236.degree. (H2O), was obtained in 1.5 g. yield from 2.2 g. ester, and the decarboxylated product, m. 280-1.degree., was obtained by sublimation. 2-Amino-5-ethoxycar-bonyl-4-methyl-6-oxo-1,3,3a,7-tetraazaindene, m. >300.degree. (H2O), was prepd. in 5-g. yield from 9.9 g. 2,5-diamino-1,2,4- triazole and 23 g. Ib; sapon. of 4 g. ester yielded 2.5 g. car-boxy deriv., m. 360.degree., and sublimation of 1.5 g.

product yielded 1 g. 2-amino-4-methyl-6-oxo-1,3,3a,7-tetraazain-dene, m. 357.degree. (II20). 5-Ethoxycarbonyl-2-methylthio-6-oxo-1,3,3a,7tetraazindene was similarly prepd., but the 1st crystals pptd. (4-oxo isomer) were removed and cooling to 4.degree. gave 2 g. colorless product, m. 209-10.degree. (H2O). I was alternatively prepd. by refluxing for 16 hrs. 4.2 q. Ia and 11.5 g. Et 2-ethoxy-1-ethoxycarbonyl crotonate in 30 cc. pyridine, cooling, and stirring with 90 cc. Et20 to ppt. the 4-oxo isomer as the pyridinium salt, then the 6-oxo isomer by cooling. Ib, b2 96-8.degree., m. 25-7.degree., was prepd. in 180-g. yield by heating progressively (30-45 min.) a mixt. of 324 g. MeC(OEt)3, 320 g. Et malonate, and 5.6 g. anhyd. KOH to 170.degree. with simultaneous distn. of EtOH; after 4 hrs. (temp. of the oil bath 205.degree.), 200 cc. EtOH was collected, the mixt. was cooled to 80.degree., distd. at 96 and 130.degree. at 2 mm., then fractionated. The 6-oxotetraazaindene derivs. were used as stabilizers and antifogging agents for photographic emul-sions. For example, the relative sensitivity, gamma, and fogging values (a) initially (b) after 1-2 weeks in an oven at 50.degree., are: blank (a) 100, 1.13, 0.11, (b) 37, 0.67, 0.61; with II 1.6 g./g. atom Ag (a) 68, 1.42, 0.08, (b) 65, 1.15, 0.14; blank (a) 100, 1.17, 0.15, (b) 82, 1.00, 0.33; with III 0.15 g./g. atom Ag, (a) 102, 1.27, 0.12, (b) 100, 1.15, 0.14.

RN 3043-82-1 CAPLUS

CN

s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylthio)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L3 ANSWER 110 OF 110 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1962:18317 CAPLUS

DOCUMENT NUMBER: 56:18317

ORIGINAL REFERENCE NO.: 56:3473h-i,3474a-f

TITLE: Structure of certain polyazaindenes. VIII.

Tetraazaindenes derived from the reaction of ethyl .beta.-ethoxy-.alpha.ethoxycarbonylcrotonate with

3-amino-1,2,4-triazoles

AUTHOR(S): Williams, L. A.

CORPORATE SOURCE: Kodak Ltd., Harrow, UK

SOURCE: J. Chem. Soc. (1961) 3046-52

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

cf. CA 55, 1875lb.--The reactions of Et .beta. ethoxy-.alpha.ethoxycarbonylcrotonate (I) with 3-amino-1,2,4triazoles could occur by 2
different routes, depending on the basicity of the medium. A no. of
tetraazaindenes were prepd. by this reaction and their spectra compared.
Et orthoacetate (324 g.), 320 g. Et malonate, and 2.3 g. Na in 60 cc. alc.
heated, the temp. raised in 30-45 min. to 170.degree., the alc. collected,
heating continued, after 4 hrs., distn. discontinued, and the mixt. cooled
and distd. in vacuo gave 220 g. I, m. 25-7.degree., n20D 1.463.
3-Amino-1,2,4-triazole (II) (4.2 g.) and 11.5 g. I refluxed 16 hrs. in 30
cc. C5H5N, shaken 2 min. with 90 cc. Et2O, the pyridinium salt sepd., the
soln. acidified, and the solid crystd. gave 2 g. Et 4,7-dihydro-6methyl-4-

oxo-1,3,3a,7-tetraazaindene-5-carboxylate (III), m. 175.degree. (H2O). II (21 g.) and 57.5 g. I heated 3 hrs. in 40 cc. AcOH gave 23 g. III. The ether filtrate obtained above afforded 3 g. Et 6,7-dihydro-4-methyl-6-oxo-1,3,3a,7-tetra azaindene-5-carboxylate (IV), m. 208.degree. (H2O). The above reaction was repeated with 5 g. NEt3; the mixt. refluxed overnight gave 4 g. IV. Na (4.6 g.) in 120 cc. alc. refluxed 6 hrs. with 16.8 g. II and 46 g. I gave 26 g. IV. III (2 g.) refluxed 1 hr. in 20 cc. 10% NaOH, acidified, and the acid recrystd. gave 1 g. 4,7-dihydro-6-methyl-4-oxo-1,3,3a,7tetraazaindene-5-carboxylic acid, m. 212.degree., with evolution of CO2, resolidified, m. 278.degree. (gas evolution). IV (26 g.) hydrolyzed as above gave 21 g. 6,7-dihydro-4-methyl-6-oxo 1,3,3a,7-tetraazaindene-5-carboxylic acid (V), m. 228-9.degree. (evolution of CO2), resolidified, m. 266-7.degree.. V (5 g.) melted under vacuum at 280.degree. gave 3 g. 6,7-dihydro-4-methyl-6oxo-1,3,3a,7-tetraazaindene (VI), plates, m. 266-7. Et .beta.-ethoxycrotonate (VII) (15.8 g.) added to 2.3 g. Na in 100 cc. alc., then 8.4 g. II and the mixt. refluxed 24 hrs. and acidified gave 2.2 g. VI. VII (15.8 g.) and 8.4 g. II refluxed 4 hrs. in 100 cc. AcOH gave 10 g. 6,7-dihydro-4-oxo-6methyl-1,3,3a,7tetraazaindene, m. 278.degree. (H2O). Na (2.3 g.) refluxed 1.5 hrs. with 60 cc. alc., 23 g. I and 13 g. 3-amino-5methylthio-1,2,4-triazole (VIIa), the mixt. acidified, and the product crystd. gave 12 g. Et 6,7-dihydro-4-methyl-2-methylthio-6-oxo-1,3,3a,7-tetraazaindene-5carboxylate (VIII), m. 214.degree. (50% AcOH). VIII was hydrolyzed as above to the acid (IX), m. 235.degree. (H2O). IX heated under vacuum until the evolution of CO2 ceased gave 6,7-dihydro-4-methyl-2methylthio-6oxo-1,3,3a,7-tetraazaindene, m. 280-1.degree. (H2O). VIIa (3.8 g.) and 6.8 g. I refluxed 4 hrs. in 30 cc. C5H5N, Et2O added, the pyridinium salt removed, and the filtrate acidified gave 1 g. Et 4,7-dihydro-6-methyl-2methylthio-4oxo-1,3,3a,7-tetraazaindene-5-carboxylate, m. 238.degree. (H2O). 3,5-Diamino-1,2,4-triazole (9.9 g.) and 23.0 g. I refluxed in 60 cc. alc. contg. 2.3 g. Na, after 3-3.5 hrs. dild. with H2O, and acidified gave 5 g. Et 2-amino-6,7-dihydro-4-methyl-6oxo-1,3,3a,7-tetraazaindene-5carboxylate (X), m. above 300.degree. (H2O). Hydrolysis of X gave the acid (XI), m. above 360.degree.. XI (1.5 g.) heated under vacuum until all had sublimed gave 0.9 g. 2-amino-6,7-dihydro-4-methyl-6-oxo-1,3,3a,7tetraazaindene, m. 357.degree. (H2O). Ultraviolet spectra were given for some of the compds.

RN 3043-82-1 CAPLUS

s-Triazolo[1,5-a]pyrimidine-6-carboxylic acid, 4,5-dihydro-7-methyl-2-(methylthio)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

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(FILE 'HOME' ENTERED AT 15:04:48 ON 06 JAN 2003)

FILE 'REGISTRY' ENTERED AT 15:05:00 ON 06 JAN 2003 STRUCTURE UPLOADED

L2 589 S L1 FUL

FILE 'CAPLUS' ENTERED AT 15:05:33 ON 06 JAN 2003 L3 110 S L2

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COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
500.21
648.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY
SESSION
-71.61
-71.61

STN INTERNATIONAL LOGOFF AT 15:07:12 ON 06 JAN 2003